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section 4(f)
evaluation for NH
34-1(2)0,
Plentywood-North,



• ENVIRONMENTAL ASSESSMENT/
PROGRAMMATIC SECTION 4(f) EVALUATION

NH 34-1(2)0
PLENTYWOOD - NORTH
SHERIDAN COUNTY, MONTANA

(P.M.S. CONTROL #1822)

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION, REGION 8

and the

State of Montana
Department of Transportation
Highways Division - Engineering

October 19, 1993

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 8

STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION

• ENVIRONMENTAL ASSESSMENT/
PROGRAMMATIC SECTION 4(f) EVALUATION

FOR

NH 34-1(2)0

PLENTYWOOD - NORTH

C.N. 1822

Submitted Pursuant to 42 U.S. C. 4332(2) (c)

and

49 U.S.C. 303

Submitted by:

Thomas Bernard

Montana Department of Transportation

Date 10-26-93

Reviewed and Approved for distribution:

Frank Honeywell

Federal Highway Administration

Date 10-27-93



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ENVIRONMENTAL ASSESSMENT

I. DESCRIPTION OF THE PROPOSED ACTION

The proposed action consists of the reconstruction of a portion of Montana State Primary 16 (FAP 34 on the attached county maps) in Sheridan County, Montana. The proposed project, known as Plentywood-North, will extend from the intersection of Montana 5 (Primary 22) at milepost 0 and extend northerly to the Canadian border at milepost 15.5±. The total length of the proposed project is 15.5 miles (±25.0 km). The project location is shown on Figure 1 and the project vicinity and terminus are shown on Figure 2.

The proposed action will involve reconstruction to a pavement width of 36 feet. The pavement width will provide two 12-foot driving lanes, with a 6 foot shoulder on each side of the roadway. The proposed typical section is shown on Figure 4.

The proposed alignment (Alternate A) generally follows the existing highway corridor. The exception is from MP 3.0± to MP 10.0± where a second alternate is being considered which does not follow the existing alignment. This alternate (designated Alternate "J") eliminates 5 curves and bypasses the Town of Raymond. The horizontal and vertical alignments would be adjusted to meet current design criteria. The horizontal alignment would be offset from the existing roadway (where feasible) to facilitate traffic on the existing alignment during construction of the proposed action.

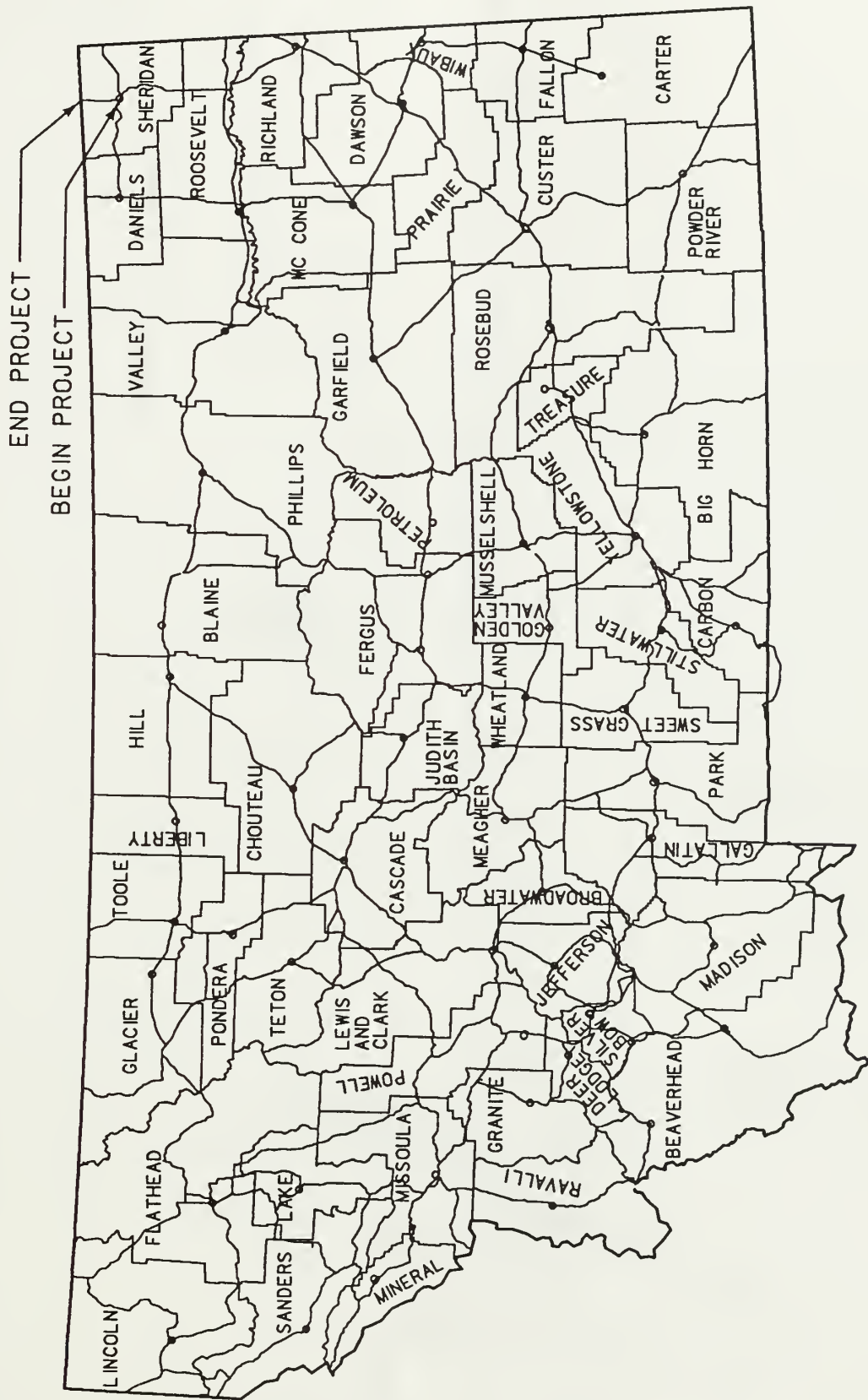
From milepost (MP) 0 in Plentywood (an incorporated community) to MP 0.8±, the proposed alignment follows the existing alignment to minimize impacts to existing improvements. From MP 0.8± to MP 3.0±, the proposed alignment is shifted 45 feet left from the existing alignment centerline. From MP 3.0± to MP 10.0±, two alternate alignments are being considered. They are designated as Alternate A and Alternate J, and are described in detail under Part III, Alternatives. Alternate "J" is the preferred alternate.

A design speed of 60 MPH will be utilized. The sharpest proposed horizontal curve is a 2°00' curve if Alternate "A" is utilized and a 1°30' curve for Alternate "J", the preferred alternate. The steepest proposed grade is 4% percent for both alternates (A&J). Desirable stopping sight distance is provided for the design speed throughout the project.

Access control is proposed from milepost 0 to milepost 1. This area is predominantly commercial at the beginning. Thereafter is a mixture of residential, commercial, golf course, rural residential and undeveloped land.

The MDT prepared an access control study for the project. During this process, they contacted most of the landowners as to their preferences for approach location and size. Recommendations for the design and location are based on the landowners preferences.

Project improvements will include grading, drainage, surfacing, signing, pavement markings, utility relocations, and access improvements.



NH34-1(2)0
 PLENTYWOOD - NORTH
 P. M. S. C#1822

FIGURE 1

F34-1(10)
 PLENTYWOOD - NORTH
 SHERIDAN COUNTY
 15.8 MILES

- LEGEND
- CENTERLINE OF PROPOSED HIGHWAY
 - "A" LINE ALTERNATE
 - "J" LINE ALTERNATE
 - RIGHT OF WAY

SCALE: 1" = 200'



Figure 3

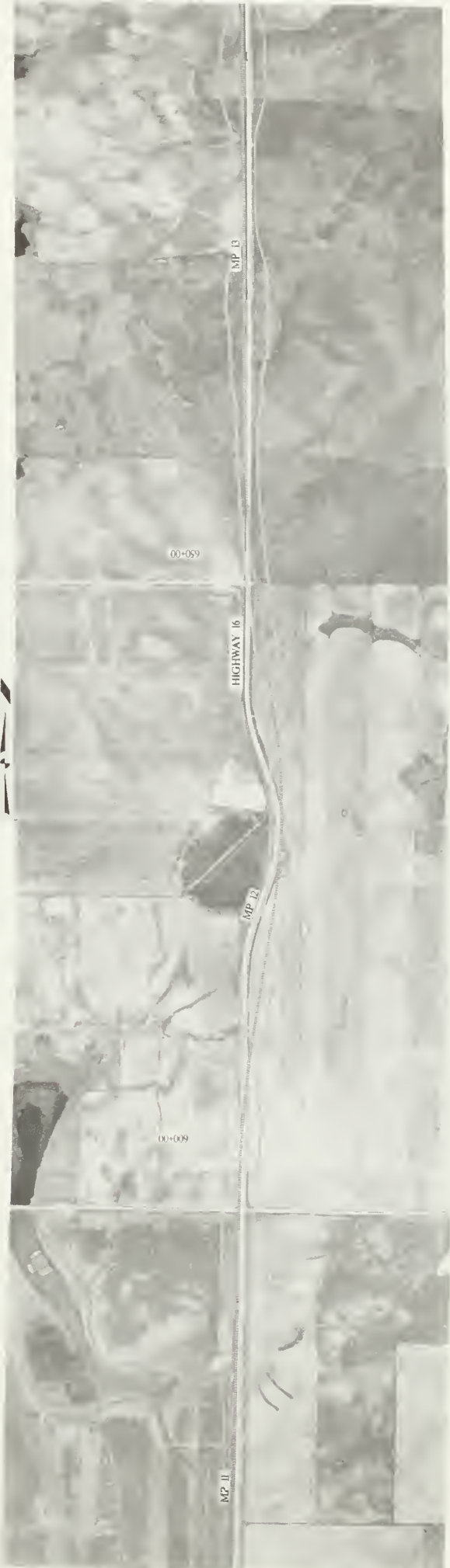
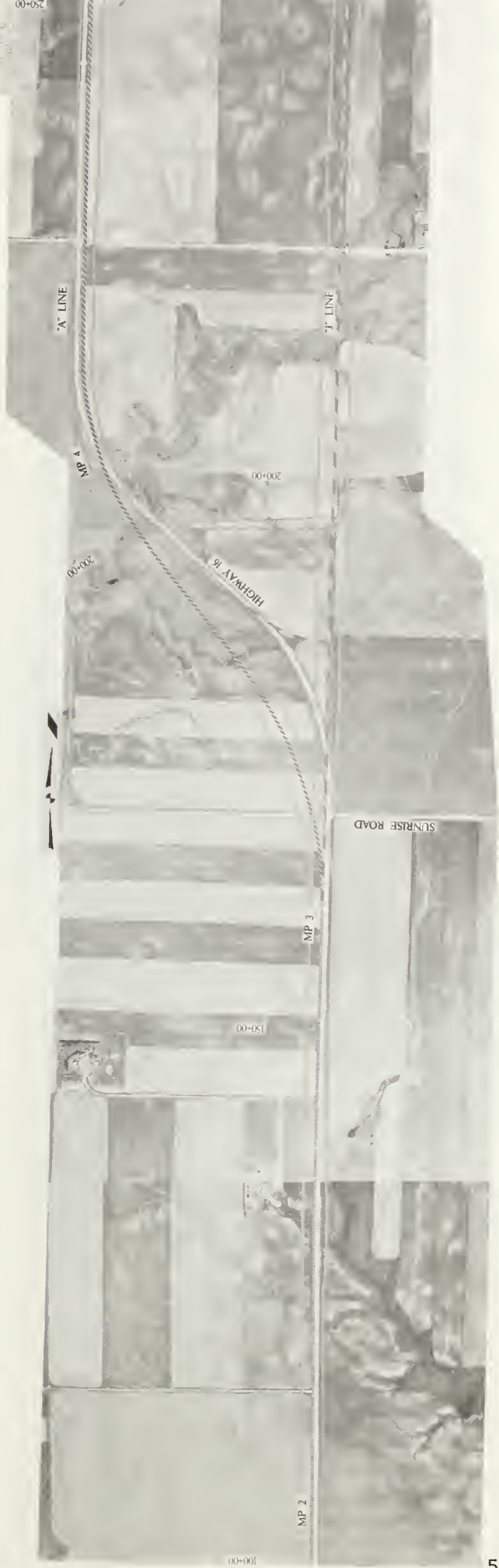


Figure 3



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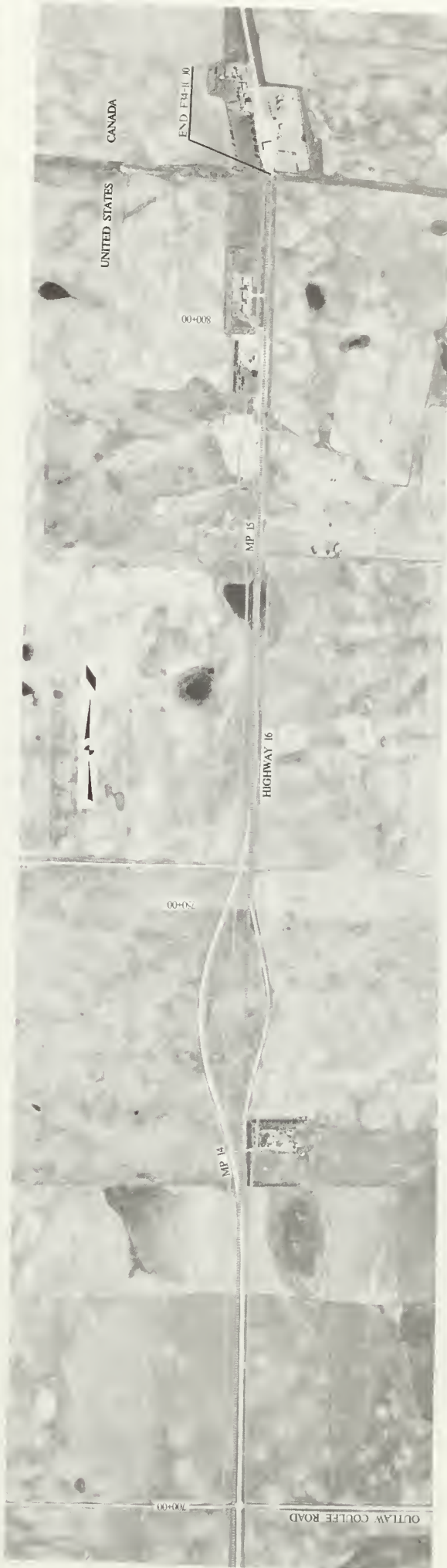


Figure 3



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Figure 3

TYPICAL SECTION

TYPICAL SECTION NO. 1

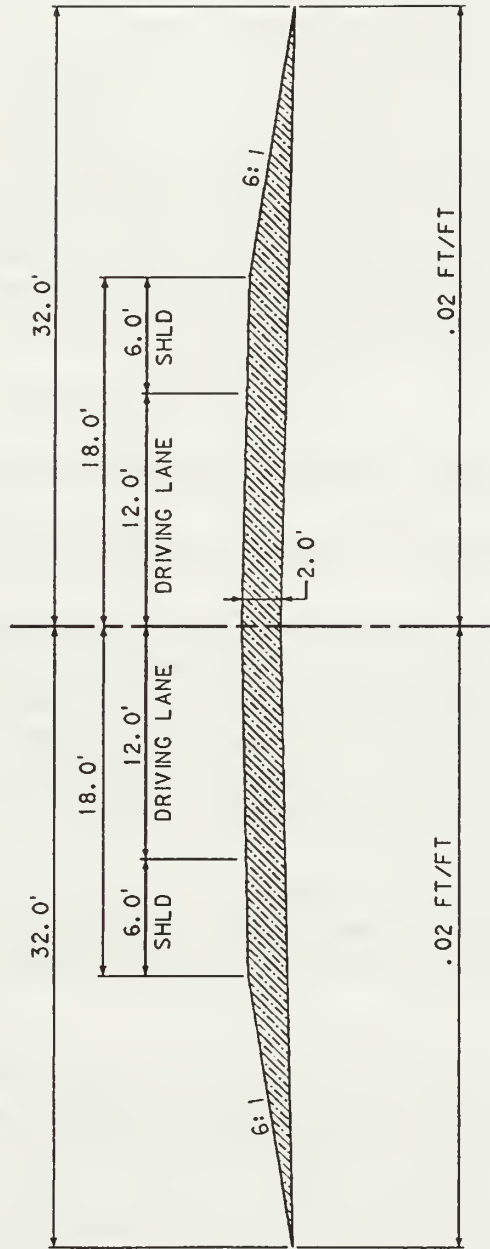


FIGURE 4

II. PURPOSE AND NEED

Plentywood - North is on the State's Primary Route 34, which is functionally classified as a principal arterial and is part of the National Highways of Significance Network. It is part of the transportation link between Canada and eastern Montana. The Port of Raymond, at the northern end of the project, provides a 24 hour port of entry between the United States and Canada. The Port of Raymond is one of two 24-hour customs stations on the U.S.-Canadian border in Montana. Highway 16 is one of three primary routes between Montana and Saskatchewan and is the only primary route to the U.S.-Canadian border in Sheridan County. The Canadian government is in the process of upgrading their roadway from Regina to the Port of Entry at Raymond. Montana Highway #16 provides the eastern-most link between the U.S.-Canadian border and U.S. Highway #2 at Culbertson. U.S. #2 is the main east/west route across northern Montana. Montana Highway #16's southerly beginning is at the interchange with Interstate 94 on the northwesterly side of Glendive. Montana #16 is also the eastern-most highway corridor between Interstate 94, the communities of Sidney, Culbertson, Plentywood, and the border. Its designation as an HNS route (described under Part IV., Transportation Facilities, following) reflects its importance as a major highway facility in this region of Montana.

The primary objectives of the proposed action are:

- To reconstruct the roadway to current primary highway design standards
- To provide a safe, efficient transportation corridor for the motoring public

The existing roadway was originally paved under two separate contracts, both of which were completed in 1951. The roadway was constructed to an average 25-foot top width and the surfacing consisted of a 3 inch gravel top course with an 8 inch gravel base. A 0.20 foot plant mix overlay was placed to a 24 foot top width in 1960. The existing horizontal alignment generally meets the criteria for the proposed 60 mph design speed with the exception of one 6°00' curve and three 5°00' curves. All of the existing horizontal curves are simple curves.

Spiral curves will be utilized on all curves 1°30' or greater. The transition spirals provide a gradual change in curvature from a straight to a circular path. The gradual change reduces the tendency of a vehicle to deviate from the logical traffic lane and provides an added factor of safety.

A majority of the existing vertical alignment does not provide the minimum stopping sight distance for a 60 mph design speed. Exact grades are not available, since they were not provided on the as-built plans for the first 5.2 miles of the existing alignment, but they are similar to the grades on the remainder of the project. On the remaining 10.6 miles of the proposed project there are thirty-three (33) crest and twenty-six (26) sag vertical curves that do not provide minimum stopping sight distance for a 60 mph design speed. More than 50% of these vertical curves provide minimum stopping sight distances for design speeds less than 45 mph.

Grades in excess of the current maximum design standard (4 percent) occur at twenty-four (24) locations on the northerly 10.2 miles of the existing roadway, with the maximum existing grade being 8.00 percent.

The existing fill slopes do not meet current design standards. For fill heights of 5 feet or less, the existing fill slopes are 4:1. The slopes are 1½:1 for fill heights greater than 5 feet. Additional widening was provided for fill height greater than 5 feet. Field inspection verifies that a majority of the cut slopes do not meet current design standards which are:

- 6:1 for fill heights from 0 to 10 feet;
- 4:1 for fill heights from 10 to 20 feet;
- 3:1 for fill heights from 20 to 30 feet;
- and 2:1 for fill heights greater than 30 feet.

Slopes in excess of current design standards increase the potential for overturning accidents, which is reflected in the accident data for this roadway section. From January, 1980 through January, 1990, fifty (50) accidents were reported, including twenty-two (22) injury accidents and two (2) fatalities. Off road accidents accounted for 66 percent of the total reported accidents compared to the statewide primary average of 44 percent. Poor sight distance along the existing alignment is a contributing factor of the off road accidents. Vehicle overturning accidents accounted for 38 percent of the total accidents on this portion of State Primary 16 compared to the statewide primary highway overturning average of 22.4 percent. Fifty-eight percent of the accidents occurred at night compared to the statewide primary average of 41 percent.

The accident rate for this project is 1.73 and the severity is 1.63 compared to statewide primary averages of 1.72 and 1.53 respectively.

Current traffic projections for the proposed action are:

1993 ADT	=	520	ADT = Average Daily Traffic
1995 ADT	=	550	DHV = Design Hour Volume
2015 ADT	=	750	D = percent of directional flow
DHV	=	100	T = percent of trucks in DHV
D	=	55% - 45%	EALs = Equivalent axle loads
T	=	16.4%	
18 kip EALs	=	65.03 daily	

For a DHV of 100, using current design standards, the minimum roadway width is 36 feet. The existing roadway width is 25 feet.

The above noted design deficiencies portray the need for the proposed action.

III. ALTERNATIVES

Three alternatives were originally considered; the "no build", the preferred alternate (Alternate "J") bypassing Raymond to the east; and following the existing highway corridor (Alternate "A").

The preferred Alternate "J" and Alternate "A" follow separate alignments from MP 3.0± to MP 10.0. From MP 0 to MP 3.0± and MP 10.0± to MP 15.5± both alternates generally follow the existing alignment.

Alternate "J" leaves the existing alignment at MP 3.0± and continues north along an extension of the existing alignment. The tangent extends northerly to MP 7.0±, which is east of the town of Raymond. From MP 7.0± to MP 7.5± the proposed alignment curves left, then right lining the ahead tangent up with the tangent extending north from MP 10.0±. Alternate "J" provides connections to the existing alignment at the town of Raymond, and at MP 3.5± and MP 9.5±. This alignment bypasses the town of Raymond.

Alternate "A" follows the existing route corridor. From MP 3.0± to MP 4.3± the curves are flattened, with the proposed alignment being left (west) of the existing alignment. From MP 4.3± to MP 6.0± located 60 feet right of the existing alignment. From MP 6.0± to MP 7.0± the proposed alignment is shifted left of the existing alignment to avoid impacts to an existing home and a historic dam site. Curves in this area would be flattened to meet current design standards. From MP 7.0± to MP 7.7± the proposed alignment follows the existing alignment through the town of Raymond and between existing improvements adjacent to Raymond. From MP 7.7± to MP 9.0±, the proposed alignment is shifted 45 feet left of the existing alignment to minimize impacts to improvements and avoid impacting an abandoned mine site. From MP 9.0± to MP 10.0, the degree of curves would be flattened to meet current design standards.

Alternate "A" follows the existing highway corridor. Grades and curves not meeting current design standards would be modified and upgraded to meet the standards.

The alternate bypassing Raymond (Alternate "J") deviates from Alternate "A" by constructing this route from milepost 3.0± to milepost 10.0±, easterly of the existing alignment. Alternate "J" eliminates five (5) of the seven (7) curves on that portion of existing alignment.

From MP 0 to MP 3.0± and from MP 10.0± to MP 15.5±, the proposed alignment for both alternates follows the existing alignment, with shifts from the existing alignment to flatten curves and to facilitate traffic on the existing alignment during construction. The average proposed shift in this area is 45 feet left of the existing alignment.

The "no build" alternative implies no activities beyond continued routine maintenance of the existing facility. The "no-build" alternative would not satisfy the objectives of the proposed project. The "no-build" would leave the existing design deficiencies in place, and increase maintenance costs as the existing roadway deteriorates.

Although the "no build" alternative would not satisfy the objectives of the proposed action, it will serve as a basis for evaluation of the impacts of the other alternatives.

IV. ENVIRONMENTAL IMPACTS

INTRODUCTION

The environmental impacts were evaluated for the following:

- Cultural Resources
- Land Use
- Recreation
- Transportation Facilities
- Utilities
- Relocations
- Social and economic impacts
- Visual
- Noise
- Air Quality
- Water Quality
- Wetlands
- Flood Hazards
- Fish and Wildlife
- Construction
- Hazardous Wastes

Using existing conditions as the baseline, impacts for each proposed alternative have been projected and evaluated. The comparison of the potential impacts provides an objective method to evaluate the alternatives and select a preferred alternate.

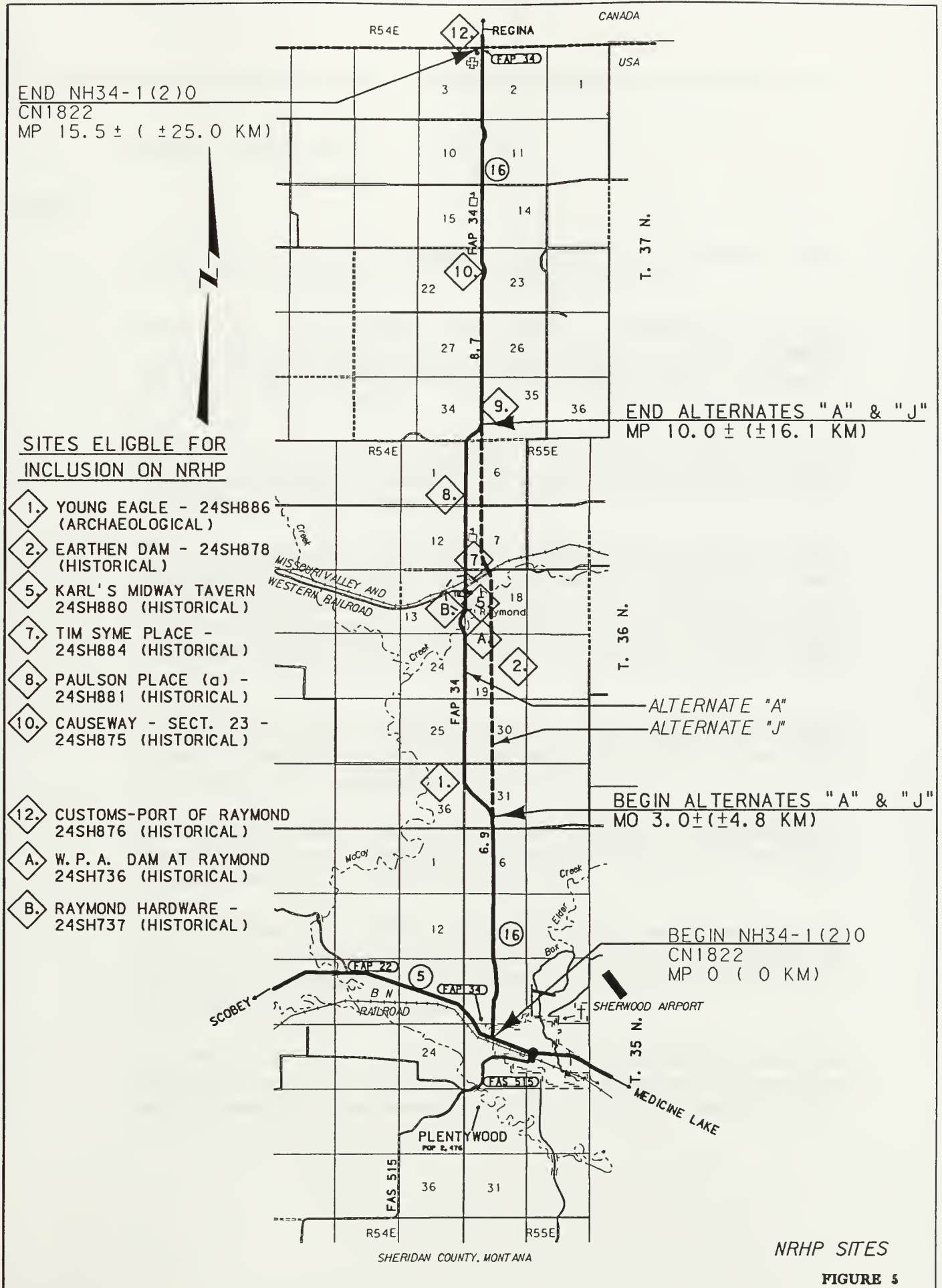
Where possible, empirical data has been used to evaluate impacts. This is generally the case with direct impacts of the proposed roadway since such impacts are usually more apparent. However, indirect or secondary impacts (impacts related to factors other than the construction and presence of the roadway such as growth due to roadway improvements, land use changes, etc.) are often less obvious and more difficult to assess. Where possible, secondary impacts have been quantified and discussed in descriptive terms.

CULTURAL RESOURCES

The Inventory and Evaluation was conducted to insure compliance with Federal cultural resource legislation: the National Historic Preservation Act (Public Law 89-665, as amended); the National Environmental Policy Act of 1969 (Public Law, 91-190); the Department of Transportation Act of 1966 (Public Law, 89-670). A copy of the report is on file with the Montana Department of Transportation (MDT) in Helena, Montana.

Twelve sites were recorded in the project area during this survey and three sites were recorded during previous surveys. Nine of the fifteen recorded sites were found to be eligible for inclusion in the National Register of Historic Places (NRHP). A map with eligible site locations and information is shown on Figure 5.

Ten of the sites are located along Alternate "A", one site is located along Alternate "J" and one is located at the northerly junction of Alternate "A" and "J". The remaining three sites are located in areas where both alignments will be in the same location.



The following is a summary of the eligible sites and how the proposed construction would affect them.

1) ALTERNATE "J" (PREFERRED ALTERNATE)

Site No.

1. Young Eagle - 24SH886 (Archaeological) is located 300 feet (91 meters) west of Alternate "A". Alternate "J" will have no affect on this site.
2. Earthen Dam - 24SH878 (Historical) is located east of Alternate "J". The crest of the dam is approximately 260 feet (79 meters) east of the proposed centerline and 160 feet (49 metes) east of the proposed construction limits. This alignment will have no affect on the site.
 - A. The WPA Dam at Raymond - 24SH736 (Historical) is located along the east side of the existing alignment. Alternate "J" is located 2,400 feet (732 meters) east of the dam site and will have no affect on the site.
- 5 & B. Karl's Midway Tavern - 24SH880 (Historical) and Raymond Hardware - 24SH737 (Historical) are structures within the town of Raymond. Karl's Midway Tavern is located right of the existing alignment and the Raymond Hardware is located left of the existing alignment. Alternate "J" bypasses the town of Raymond and will have no affect on either site. Alternate "J" is 2,600 ± feet (790 ± meters) east of these sites.
7. The Tim Syme Place - 24SH884 (Historical) is located east of the existing roadway. Alternate "J" is located approximately 1,300 feet (396 meters) east of the existing roadway and will have no affect on the site.
8. Paulson Place - 24SH881 (Historical) is located east of the existing alignment. Alternate "J" is located approximately 1,250 feet (381 meters) east of the existing alignment and will have no affect on this site.
9. The Broken Back Site - 24SH874 (Archaeological) is located approximately 150 feet (46 meters) east of the existing alignment. Alternate "J" is located (50 feet (15 meters) west of the existing alignment. No adverse affects to the site will result from construction of Alternate "J".
10. Causeway - Sect. 23 - 24SH875 (Historical) is located west of the existing alignment adjacent to the existing right of way. The Alternate "J" is located 60± feet (18 meters) east of the existing alignment and no adverse impacts will result from the proposed construction.

11. Customs - Port of Raymond - 24SH876 (Historical) is located east of the existing alignment. The proposed alignment will widen the existing roadway in this area. All widening will be away from the existing structure. Pavement adjacent to the structure will be replaced. The proposed and existing grades are approximately equal, thus not changing the appearance of the structure in relation to the adjacent surfacing. No adverse impacts to the structure will be caused by construction of Alternate "J".

2) ALTERNATE "A"

Site No.

1. Young Eagle - 24SH886 (Archaeological) is located 300 feet (91 meters) west of Alternate "A". The proposed roadway will be further from the site than the existing alignment. This will not adversely affect the site.
2. Earthen Dam - 24SH878 (Historical) is located approximately 2,600 feet (792 meters) east of Alternate "A". Alternate "A" will have no adverse affect on the site.
- A. The WPA Dam at Raymond - 24SH736 (Historical) is located along the east side of the existing alignment. The existing alignment appears to form a portion of the dam containing the reservoir. The proposed Alternate "A" alignment is located 70 feet (21 meters) west of the existing alignment and will have no adverse affect on the site.
- 5 & B. Karl's Midway Tavern - 24SH880 (Historical) and Raymond Hardware - 24SH737 (Historical) are structures within the town of Raymond along Alternate "A". Karl's Midway Tavern is located 75 feet (23 meters) right of the existing alignment and the Raymond Hardware is located 30 feet (9 meters) left of the existing alignment. The existing right of way through the area is 60 feet (18 meters) which is inadequate for the proposed roadway. Alternate "A" will involve the removal of the Raymond Hardware. If Alternate "A" is selected, a Section 4(f) evaluation will be prepared to evaluate the impacts to the structure.
7. The Tim Syme Place Boundary - 24SH884 (Historical) is located 65 feet (20 meters) east of Alternate "A". The proposed centerline follows the existing alignment centerline in this area. The proposed ditch section will cause construction approximately 30 feet (9 meters) closer to undisturbed school site. This will cause significant impacts to the site and require the preparation of a Section 4(f) evaluation to evaluate the final alignment location and impacts to the site, if Alternate "A" is selected.

8. Paulson Place - 24SH881 (Historical) is located along Alternate "A", the boundary is 50 feet (15 meters) east of the existing alignment. The proposed alignment is shifted 30 feet (9 meters) west of the existing alignment, moving this roadway away from the Paulson Place. Construction of the proposed alternate will have no adverse impacts on the site.
9. The Broken Back Site - 24SH874 (Archaeological) is located approximately 150 feet (46 meters) east of the existing alignment. Alternate "A" is located 50 feet (15 meters) west of the existing alignment. No adverse affects to the site will result from construction of Alternate "A".
10. Causeway - Sect. 23 - 24SH875 (Historical) is located west of the existing alignment adjacent to the existing right of way. Alternate "A" is located 60 ± feet (18 meters) east of the existing alignment and no adverse impacts will result from the proposed construction.
11. Customs - Port of Raymond - 24SH876 (Historical) is located east of the existing alignment. The proposed alignment will widen the existing roadway in this area. All widening will be away from the existing structure. Pavement adjacent to the structure will be replaced. The proposed and existing grades are approximately equal, thus not changing the appearance of the structure in relation to the adjacent surfacing. No adverse impacts to the structure will be caused by construction of the proposed project.

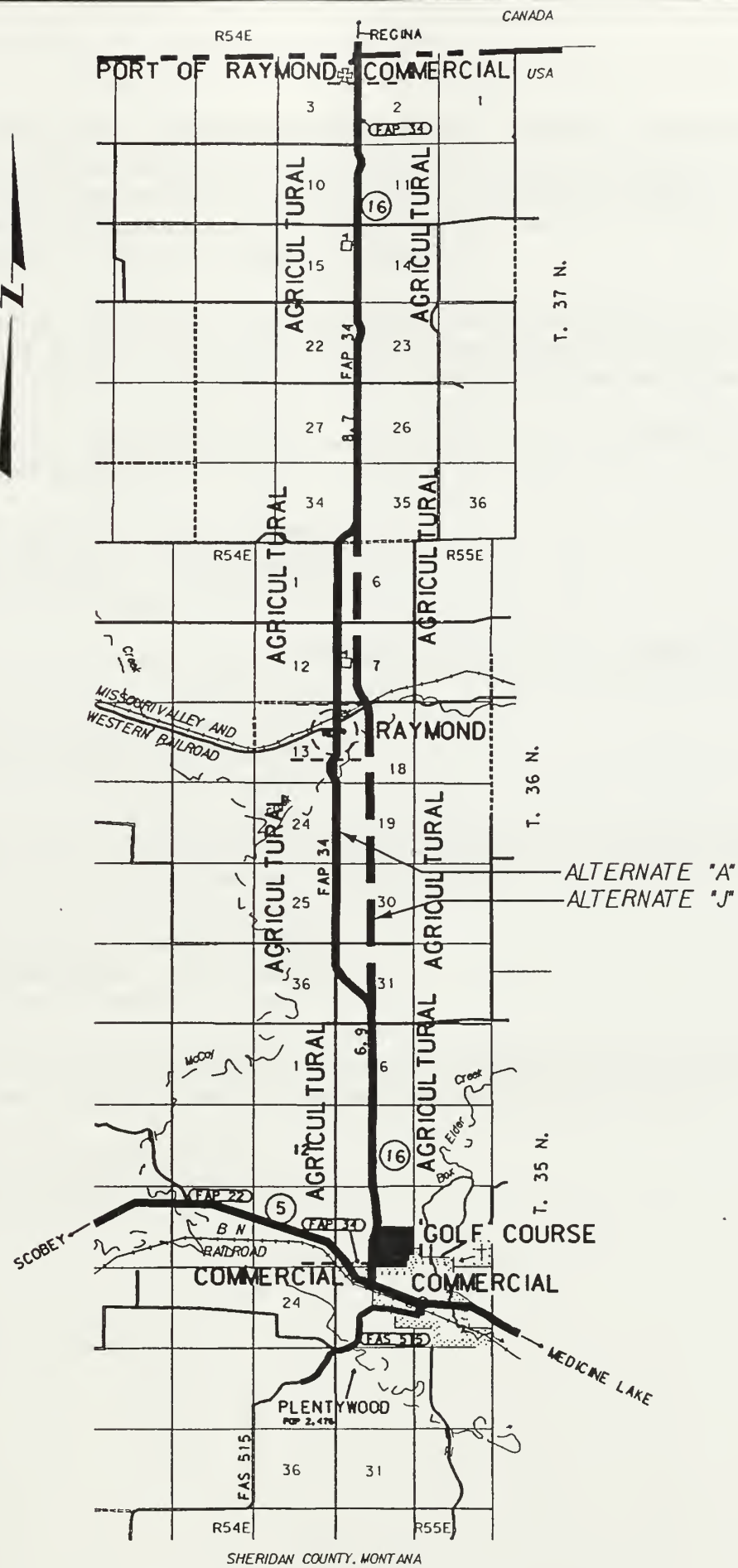
3) NO BUILD ALTERNATE

The no build alternate will have no affects on cultural resources located within the project boundaries.

LAND USE

Land use varies throughout the project, with the major use being agriculture (See Figure 6). The following are the exceptions to agricultural use:

- M.P. 0 to M.P. 0.25 ± is within the city limits of Plentywood. The majority of this land is commercial. (Alternate "A" & "J")
- M.P. 0.25 ± to M.P. 0.65 ± includes a golf course on the east and a trucking firm and rural home on the west. (Alternate "A" & "J")
- The Town of Raymond is located from M.P. 6.95 ± to 7.2 ±. Buildings along the R/W include a bar on the east, a dwelling and two unoccupied structures on the west. (This affects only Alternate "A")
- M.P. 15.3 ± to M.P. 15.5 ± contains the Port of Raymond Customs Station and a business on the west. (Alternate "A" & "J")



LAND USES
FIGURE 6

The agricultural land consists of small grain production, grazing and CRP (Conservation Reserve Program) acreage. None of the land appears to be irrigated. A U.S. Farmland Conversion Impact Rating form has been completed to evaluate impacts to agricultural lands in the project corridor. The sum of the impact rating is 158 for Alternate "A" and 159 for Alternate "J". A copy of the FPPA #AD-1006 form is enclosed in Appendix "B".

7CRF 658.4(c), Part 2 - Page 27725 of Vol 49 FR #130 --- States that "Sites receiving a total score of less than 160 be given a minimal level of consideration for protection and no additional sites be evaluated." The following is the criteria used to complete the farm land impact rating.

1. How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

2. How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

3. How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

4. Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points
Site is not protected - 0 points

5. How close is the site to an urban built-up area?
- The site is 2 miles or more from an urban built-up area - 15 points
 The site is more than 1 mile but less than 2 miles from an urban built-up area - 10 points
 The site is less than 1 mile from, but is not adjacent to an urban built-up area - 5 points
 The site is adjacent to an urban built-up area - 0 points
6. How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?
- None of the services exist nearer than 3 miles from the site - 15 points
 Some of the services exist more than 1 but less than 3 miles from the site - 10 points
 All of the services exist within ½ mile of the site - 0 points
7. Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county?
- As large or larger - 10 points
 Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points
8. If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
- Acreage equal to more than 25 percent of acres directly converted by the project - 10 points
 Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 9 to 1 point(s)
 Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points
9. Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
- All required services are available - 5 points
 Some required services are available - 4 to 1 point(s)
 No required services are available - 0 points

10. Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points

Moderate amount of on-farm investment - 19 to 1 point(s)

No on-farm investment - 0 points

11. Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 10 points

Some reduction in demand for support services if the site is converted - 9 to 1 point(s)

No significant reduction in demand for support services if the site is converted - 0 points

12. Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible with existing agricultural use of surrounding farmland - 10 points.

Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)

Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

Corridor-Type Site Assessment. The following criteria are to be used for projects that have a linear or corridor-type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information designed in § 658.4(a). All criteria for corridor-type sites will be scored as shown in § 658.5(b) for other sites, except as noted below:

1. Criteria 5 and 6 will not be considered.
2. Criterion 8 will be scored on a scale of 0 to 25 points, and criterion 11 will be scored on a scale of 0 to 25 points.

The "no build" alternate will have no affect on land use. Both the "A" and "J" alternates will have an affect. No Federally owned lands will be impacted by this proposed project.

Alternate "J" (the preferred alternate) will require new right-of-way for its entire 6± mile (9.7 km) length. The minimum requirement will be 160 feet (49 meters) of right-of-way. The first 4 miles (6.4 km) of Alternate "J" is along the easterly boundary of the farms from which the right-of-way is required. The final 2.5 miles (4.0 km) of Alternate "J" right-of-way splits the farms through which it passes. This will leave a portion of the remaining fields on each side of the proposed alignment.

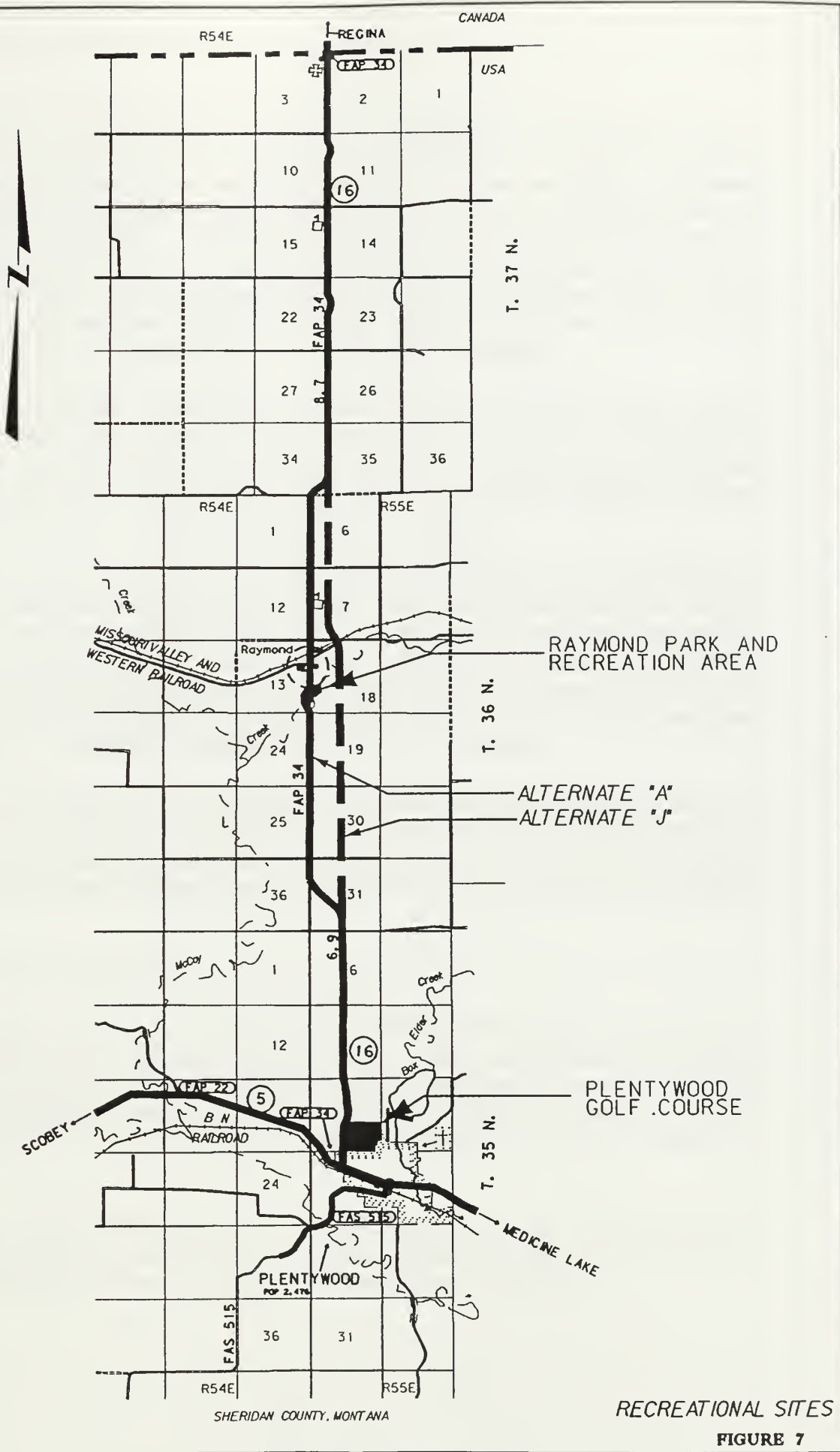
The "A" alternate follows the existing highway corridor, but will require additional right-of-way for a majority of the project length. The proposed alignments centerline will be shifted from the existing centerline. Additional right-of-way requirements will vary from zero feet to 200± feet (61 meters) with the average being 120± feet (37 meters). This alternate may require the relocation of three structures within the Town of Raymond; one of the structures has been found eligible for inclusion in the National Register of Historic Places.

Both Alternate "A" and "J" will change land use by removing land from agricultural production with the large farm units along the project. The right of way taken will not alter overall land uses. Construction of this project will not affect housing trends along the project corridor.

RECREATIONAL IMPACTS

Two recreational sites (see Figure 7) exist along the proposed alignments, the Raymond Park and Recreation Area (Alternate "A") and the Plentywood Golf Course (Alternate "A" & "J").

The Raymond Park and Recreation Area is located in Section 18, Township 36 North, Range 5 East, P.M.M. along the west edge of the Raymond Dam, east of the existing alignment. It was originally developed in 1956 and is currently managed and maintained by the Raymond Recreation Area Board. The proposed Alternate "A" is located west of the existing alignment. Access will be perpetuated from the proposed Alternate "A" to all current access points in the Park. The proposed action has no adverse impacts on the Raymond Park and Recreation Area. During construction of Alternate "A" access would be maintained to the Raymond Park and Recreation Area. At least one approach would be maintained at all times. Alternate "J" is located east of the Raymond Park and Recreation Area and construction would have no impact on existing access. Motorists using Alternate "J" would not pass directly by the entrance to the park. Thus a secondary impact would be reduced usage by the traveling public which is not aware of the parks existence. Proper signing on the proposed alignment would alleviate the problem.



RECREATIONAL SITES
FIGURE 7

The Plentywood Golf Course is located in Section 18, Township 35 North, Range 55 East, P.M.M., east of the existing alignment from MP 0.25± to MP 0.65±. The Course is operated by the Plentywood Golf Club, a non-profit organization. It is open for play to the general public. Land adjacent to the existing alignment is leased from the City of Plentywood and Sheridan County to the Golf Club. The portion of the course leased from Sheridan County is subject to the provisions of Section 4(f) of the 1966 U.S. Dept. of Transportation Act (49 U.S.C. 303). The portion of the course leased from the City of Plentywood has received assistance from the Land and Water Conservation Fund Act (16 U.S.C. 460) (L&WCF) and the property is subject to the provisions of Section 6(f) of the L&WCF Act, as amended.

Sheridan County owns the N½ of the SE¼, Section 18, Township 35 North, Range 55 East, P.M.M. A portion of this 80 acre tract is leased to the golf club and the remainder farmed by the adjoining landowner. No records are available in the County Courthouse that provide an actual description or area of the land used by the golf course. By scaling aerial maps, it appears that approximately 60 acres are being used for golf course purposes.

The City of Plentywood land consists of 34.20 acres located in the SW¼, SE¼ of said Section 18. The City land was obtained using L&WC money. The L&WCF money was also used for development work consisting of turf irrigation systems with pump and well, site preparation, landscaping, water storage reservoir, fencing, storage building, rain shelters, installation of greens, seeding and fertilizing fairways and other necessary facilities. A copy of the deed and letter from MDFW&P concerning the L&WCF is included in Appendix B. A map (see Figure 11) showing property boundaries is included in the section 4(f) statement.

Right of Way will be required from the Sheridan County lease portion of the Golf Course for construction of the proposed road. A Section 4(f) evaluation is included with this document to access the impacts due to the proposed action. It is located in Section VI, which begins on Page 43. Value of the land required for right of way will be fair market value determined by qualified land appraiser.

TRANSPORTATION FACILITIES

The area is currently served by an airport (at Plentywood), two railroads (the Burlington Northern/BN at Plentywood and the Dakota, Missouri Valley and Western/DMV&W at Raymond) and two primary highways. Montana Highway #5 runs east-west and Montana Highway #16 (including this proposed project) runs north-south through Plentywood (see Figure 5). Montana Highway #16 has been included on the list of Highways of National Significance (HNS).

The proposed improvements (either Alternate "A" or "J") will not generate a significant amount of additional traffic beyond the normal increase that would occur with the no-build alternate. This proposed project will not have any impact on either railroad or the airport.

UTILITIES

Utilities currently located along or across the proposed project corridor include: telephone, electrical, water main, sanitary sewer main, and an oil products line. The various utility companies are being consulted on the scope of the project. Coordination will be made to assure that any adjustments or upgrades of existing utilities are completed prior to roadway construction. This will allow minimal disruption of service to consumers. No long term permanent impacts to utility service will result from this project.

The "no build" alternative would not have any impacts on existing utility services.

RELOCATION IMPACTS

Construction of the preferred Alternate "J" will not cause any relocation impacts.

Construction of Alternate "A" may cause the displacement of three structures (see Figure 8), depending on design criteria selected for this portion of the proposed project. All three structures are located west of the existing alignment, within the town of Raymond. Only one of the three structures is currently occupied. It is a former motel, of which a portion has been converted into living quarters. One structure is eligible for inclusion on the National Register of Historic places. It is the Raymond Hardware Store - 24SH737. If Alternate "A" is selected, a Section 4-f Evaluation will be prepared to evaluate impacts to the structure. The remaining structure is a metal grain bin.

Any individual, family, business or farm displaced by a Federal or federally assisted program is offered relocation assistance services to locate a suitable replacement property. (49 CFR Part 24). The program also provides reimbursement of moving costs and certain related expenses in addition to the actual value of the property being purchased.

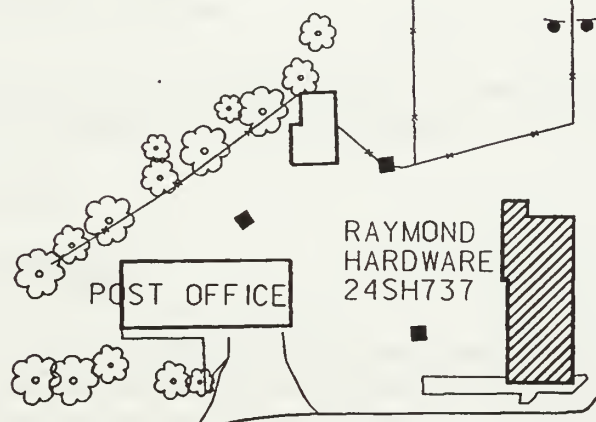
A complete description of services is provided in the booklet "Your Rights and Benefits as a Displaced Person" - Montana Relocation Assistance Program. It is available from the MDT Right of Way Bureau in Helena, Montana.

The relocations will not affect any known minority group or neighborhood. The residential relocation will affect one person currently living in the converted motel unit.

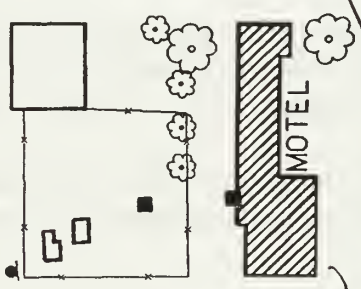
RAYMOND



MISSOURI VALLEY AND
WESTERN RAILROAD



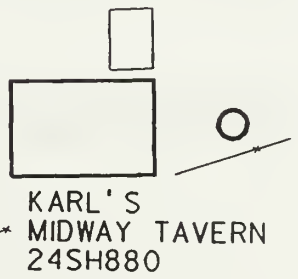
MAIN STREET



METAL
GRAIN BINS



FAP 34 (16)



KARL'S
MIDWAY TAVERN
24SH880

 STRUCTURES TO
BE RELOCATED

FIGURE 8

SOCIAL AND ECONOMIC IMPACTS

The proposed action will not have any significant social or economic impacts. This project primarily involves upgrading the existing facility to modern standards; to improve safety; and to provide a roadway capable of adequately handling existing and projected traffic volumes.

Alternate "J" bypasses the town of Raymond, with a paved connection road built from the proposed roadway to the existing road through town. There is one business (Karl's Midway Tavern) in Raymond affected by relocated alignment. Alternate "J" would move the roadway from passing directly in front of the business to a remote location. This would reduce or eliminate drive by customers. Patrons using the Alternate "J" alignment would be required to exit the main roadway to obtain the services provide by Karl's Midway Tavern. The distance from Alternate "J" to the Tavern is approximately 0.3 miles.

Alternate "J" also provides paved connections to the existing alignment at the northerly and southerly termini of the alternate.

The project will not affect any known minority group or neighborhood. Effects caused by construction are discussed later in this assessment.

VISUAL IMPACTS

VISUAL ENVIRONMENT

The vegetation within the project and regional area is mainly dryland farming (small grain production). Small wetland areas occur at four locations in the project area and throughout the region in drainage channels and natural potholes. The landscape is rolling hills with virtually no natural trees. Trees and shelter belts exist around farmsteads and within the towns of Plentywood and Raymond.

The existing roadway has a 25 foot paved surface. The vertical alignment closely follows the existing contour of the landscape. The existing horizontal alignment generally follows section lines, with horizontal curves around major obstacles (wetlands, Raymond Dam and a large hill).

The proposed project would provide a 36 foot paved surface. The vertical alignment will flatten grades and minimize grade changes. The grade changes will result in cuts and fills of 20 to 30 feet in thirteen locations.

The proposed project, except for portions of the preferred Alternate "J", will simply replace the existing facility. Alternate "J" (MP 3.0± to MP 10.0±) is located easterly of the existing alignment, and bypasses the town of Raymond.

VIEWERS

Viewer groups can be characterized by their exposure and sensitivity. Viewer exposure to a project consists of viewer location, the number of people in each group, and the duration of their view. Viewer sensitivity is the receptivity of different viewers to their visual environment and is strongly affected by viewer activities, expectations and preferences. The most sensitive viewer groups are then engaged in recreational activities, followed by those in residential areas. Motorists can be considered moderate in viewer sensitivity.

KEY VIEWS

Visually distinct units in the project include:

- The Town of Raymond
- The Plentywood Golf Course (MP 0.5±)
- The Raymond Park and Recreation Area (MP 6.5±)
- The Town of Raymond (MP 7.0±)
- Wetland (MP 12.0±)
- Port of Raymond (MP 15.4±)
- Farmsteads and Structures throughout the project

IMPACTS

The following criteria was used to rate the impacts on the views for each alternative

High Impact - The proposed alternative would impact visually sensitive views. The locations may be deemed sensitive for their visual quality, uniqueness or cultural significance.

Moderate Impact - The proposed alternative would impact areas with a much lesser quality of view. Impacts may be substantial, but on relatively common views.

Low Impact - The proposed alternative would have only a minor or no impact on the existing views and viewers. No visually sensitive areas would be impacted.

Both alternative ("A" and "J") have the same alignment, grade and impacts for the following views:

- **The Town of Plentywood:** The proposed alignment and grade match the existing roadway. The major change would be a slight widening of the roadway section.

The view from the road of the town would be unchanged. The view of the road from the town would be virtually unchanged as the wider roadway would not be easily noticed. The impact on the visual quality for this view would be low.

- The Plentywood Golf Course: The proposed alignment matches the centerline of the existing roadway. The proposed grade is flatter than the existing grades, resulting in larger cuts and fills. The proposed fill slopes (6:1) are flatter than the existing fill slopes (1½:1). The flatter slopes will allow maintenance of the slope area (mowing grass, etc).

The view from the road of the golf course will be virtually unchanged. The height of the viewer above the course may vary slightly from the existing view. The view of the road from the golf course should be improved. The proposed grade will be uniform and more graceful than the existing alignment. The mowed, landscaped fill slopes will be more eye appealing than the existing unmaintained slopes. The impact on visual quality will be low.

- Wetland (MP 12.0±): The proposed roadway moves from 50 feet (15 meters) to 200 feet (61 meters) away from the wetland area. The grade is approximately 8 feet (2.4 meters) higher than the existing road, but generally follows the existing ground. Cut and fill slopes will be flatter than the existing slopes. The existing road will be obliterated and possibly converted to wetlands.

The view from the road of the wetlands will be unchanged except for the slight change in height (2.4 meters) of the viewer. The view of the roadway from the wetlands will present a grade with a smooth line and backslopes flat enough to be maintained. The change from the existing view will be only marginally different. The impact on visual quality will be low.

- Port of Raymond: The proposed alignment will match the alignment and grade of the existing roadway. The pavement will be widened away from the Port to provide additional driving and parking lanes.

The view from the road of the Port of Raymond will remain unchanged.

The view of the road from the Port of Raymond will be such that the viewer will notice a considerably wider pavement section to accommodate the existing traffic lanes and parking. The viewer may see additional vehicles parked or waiting to be inspected. The impact on visual quality will be moderate.

- Farmsteads and Structures Throughout the Project:

Alternate "A" follows the existing horizontal alignment throughout the project. Alternate "J" would be more visible from (move closer to) three farmsteads, while moving away from five farmstead. The view of the road will see areas of additional cut and fill. The view from the road will be nearly the same as exists now. The new modern roadway may actually enhance the visual resources with a more graceful vertical and horizontal alignment. The visual quality impact will be low.

Alternate "A"

- The Raymond Park and Recreation Area (MP 6.5±).

The proposed road will move slightly away from the park and remain at approximately the same elevation. The tree screen between the road and the park will remain intact.

The view from the road of the park will remain the same. The view of the road from the park will change slightly because of flatter slopes and curves. The impact on visual quality will be low.

- The Town of Raymond.

The proposed alignment will cause the removal of three structures within the Town of Raymond. The grade would closely follow the existing grades.

The view from the road would change substantially as three buildings (one historic) would be removed from the landscape.

The view of the road would change with the removal of the three buildings. The road would be visible from additional locations. The impact on visual quality would be high.

Alternate "J"

- The Raymond Park and Recreation Area (MP 6.5±) and the Town of Raymond.

The proposed alignment would relocate the road approximately half mile north of these view points.

The view of the park and town from the road would be from a different direction and from approximately a half mile further away. The view would be an encompassing look at the total facility rather than of individual items. The view of the road from the park and town would also change. Instead of seeing only a small segment of road, a large portion would be viewed. The view would present a vertical alignment that blends with the natural grade of the area. The impact on visual quality would be moderate.

SUMMARY OF IMPACTS

The following is a summary of the visual quality impacts:

VIEW POINT	NO BUILD	ALTERNATE "A"	ALTERNATE "J"
Town of Plentywood	No Impact	Low	Low
Plentywood Golf Course	No Impact	Low	Low
Raymond Park & Recreation Area	No Impact	Moderate	Moderate
Town of Raymond	No Impact	High	Moderate
Wetland	No Impact	Low	Low
Port of Raymond	No Impact	Moderate	Moderate
Farmstead & Structures	No Impact	Low	Low

Each of the build alternatives will alter the views along the project. The motorists will experience a different view of the surrounding area. Some of the views will offer the viewers increased visual quality with a more homogeneous setting and some of the views will degenerate in quality.

NOISE IMPACTS

The MDT Environmental and Hazardous Waste Bureau conducted a noise analysis for this project. The complete study and findings are on file at the Montana Department of Transportation, Helena, Montana. The following is a summary and the conclusions of the report.

Four typical sites were analyzed for the alternate alignments and an analysis for the "no-build" alternate for the present and design year were performed.

The "no-build" alternative would receive an increase in noise levels of 2 decibels for the project life.

A roadway move of 15.2 m (50 feet) closer to a structure typically increases the design year noise level at the structure by 4 decibels. This applies in areas where the proposed alignment is shifted from the existing alignment. The alternate's proposed alignments move from 13.7 m (45 feet) to 18.2 m (60 feet) from the existing alignment. A home on the same side of the existing alignment as the direction of shift for the proposed alignment would realize an approximate 4 decibel increase in noise levels over the life of the project.

A roadway move from 350 m (1150 feet) from a structure to 198 m (650 feet) from the structure results in a increase in the design year noise level at the structure by approximately 5 decibels.

The following are Leq(h) dBA levels for the existing conditions and for the projected design year calculated at varying distances and traffic speeds.

<u>Distance from Centerline</u>	<u>Present Year</u>	<u>Design Year</u>
56 km/Hr (35 mph)		
22.9 m (75')	56	58
45.7 m (150')	51	53
91.4 m (300')	47	49
72 km/hr (45 mph)		
22.9 m (75')	58	60
45.7 m (150')	53	55
91.4 m (300')	49	51
88 km/hr (55 mph)		
22.9 m (75')	59	61
45.7 m (150')	55	57
91.4 m (300')	50	52
	T = 16.4%	T = 16.4%

The effect to specific locations is:

ALTERNATE "J" (PREFERRED ALTERNATE)

Within Town of
Plentywood

No change in noise level due to road location.

135+00 Lt (House)

Road moves 15.2 m (50 feet) closer resulting in an increase of approximately 4 dBA. The resulting design year dBA is Leq(h) = 50.

200+00 Lt (House)

Road moves 640 M (2,100 feet) further away from home.

224+00 Rt (House)

Alternate "J" will be 244 m (800 feet) from home. This is 762 m (2,500 feet) closer than the existing road design. The design year noise level will be less than Leq (h) = 50 dBA.

267+00 Lt (House)

Alternate "J" is 152 m (500 feet) farther from the home than the existing road, resulting in a decrease of 5 dBA.

Town of Raymond	Alternate "J" is 762 m (2,500 feet) farther from homes in Raymond than the existing road. Noise levels will be significantly decreased.
373+00 Rt (House)	Alternate "J" is 152 m (500 feet) from home. The existing road was 914 m (3,000 feet) away from the home. The noise level would be approx. $Leq(h) = 47$ dBA.
522+00 & 527+00 Rt. (house)	Alternate "J" moves 15.2 m (50 feet) away from the present alignment resulting in a decrease of approximately 4 dBA.
730+00 (House)	Alternate "J" is 91 m (300 feet) from the home, which is 100 feet closer than the existing road. The projected noise level is $Leq(h) = 52$ dBA, which is an increase of 3 dBA higher than the existing alignment.
Port of Raymond	The existing alignment and Alternate "J" are at the same location. Thus, no noise increase results from moving the road.

ALTERNATE "A" - only the areas which differ from Alternate "J" will be discussed.

200+00 Rt (House)	Road moves 5.2 m (50 feet) away from house resulting in a noise decrease of approximately 4 dBA.
224+00 Rt (House)	
267+00 Rt (House)	
332+00 Rt (House)	
Town of Raymond	Alignment moves 15.2 m (50 feet) left of existing centerline resulting in an approximately 4 dBA increase for homes west of the road and an approximately 4 dBA decrease for homes east of the road.
430+00 (House)	Road moves away from home resulting in a 4 dBA decrease in noise levels.

Calculations indicate the Design Year (2015) noise levels will not increase substantially (less than 10 decibels (dBA)) over existing levels; nor will Design Year noise levels exceed the 23 CFR 772 Noise Abatement Criteria of $Leq(h) = 67$ dBA for Category B (schools, residences, churches, public meeting facilities) at potentially sensitive receivers. Overall, traffic noise level increase will be insignificant with the construction of this project. No adverse affects from noise increase would occur as a result of construction of either proposed alignment.

AIR QUALITY IMPACTS

This proposed project is located in an "unclassifiable" attainment area of Montana for air quality under 40 CFR 81.327. As this type of project has no impact on regional emissions according to the June 7, 1991 USDOT & EPA Interim Guidance for the Clean Air Act Amendments - Section 6.2 and the Appendix - a carbon monoxide (CO) analysis will not be necessary. Therefore, this proposed project complies with the 1990 Clean air Act Amendments (23 U.S.C. 176(c)) during "Phase I" of the "Interim Period".

The State Air Quality Bureau was consulted about the potential impacts resulting from this project. The Bureau's response was "In general, any project which will smooth out traffic flow and reduce stopping and idling time, will also reduce the amount of air pollution emission from transportation sources."

Construction of this project (the preferred Alternate "J" or Alternate "A") should have a long term beneficial impact on air quality. There would be a short term adverse impact resulting from construction activities, traffic delays and detours during construction. These adverse impacts will be minimized to the extent practical through proper construction practices and planning of detours and construction zones. The "no-build" alternative would do nothing to improve air quality, and air quality would deteriorate as the number of vehicles utilizing the road increases in the future.

WATER QUALITY IMPACTS

All work on this proposed project will be in accordance with Section 319 of the Water Quality Act of 1987 (P.L. 100-4). The control of water pollution for both specific and non-point sources will also be maintained as described in Section 402 of the National Pollution Discharge and Environmental Systems (P.L. 92-500). This proposed project will also comply with the Montana Water Quality Act for Section 3(a) authorizations.

The Montana Pollutant Discharge Elimination System (MPDES) regulations (ARM 16.20.1314) require a storm water discharge permit for construction activity in which clearing, grading and excavating will result in the disturbance of >5 acres total or the disturbance of >1 acre if located within 100 feet of a surface water body. This project will comply with MPDES by utilizing the Interim MDT Standard Operating Procedures for Best Management Practices for Erosion Control and the MDT Standard Erosion Control Workplan.

A Federal Clean Water Act Section 404 Permit is required for any proposed project that will result in the discharge or placement of dredged or fill material into waters of the United States, including wetlands. A U.S. Army Corps of Engineers Nationwide Permit is appropriate for this project.

A Montana Stream Protection Act - 124 permit is required for any proposed project which may affect the natural existing shape and form of any stream or its banks or tributaries. The Act is

administered by the Montana Department of Fish, Wildlife and Parks (MDFW&P). The MDFW&P will review the proposed project and construction methods. When concurrence is realized on project design, a Memorandum of Authorization and Agreement (MAA) is executed between the MDT and MDFW&P.

By complying with all required permits and construction practices, this project (preferred Alternate "J" or Alternate "A") will have no adverse short or long term affect on water quality.

The no build alternate will not have any water quality impacts.

WETLAND IMPACTS

Executive Order 11990, "Protection of Wetlands", established a national policy to avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modifications of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. The "no-build" alternative is not considered to be practical. Either Alternate "J" (the preferred alternate) or "A" would avoid wetland impacts to the extent practicable.

The requirements of the Federal Clean Water Act were discussed in the section on Water Quality Impacts.

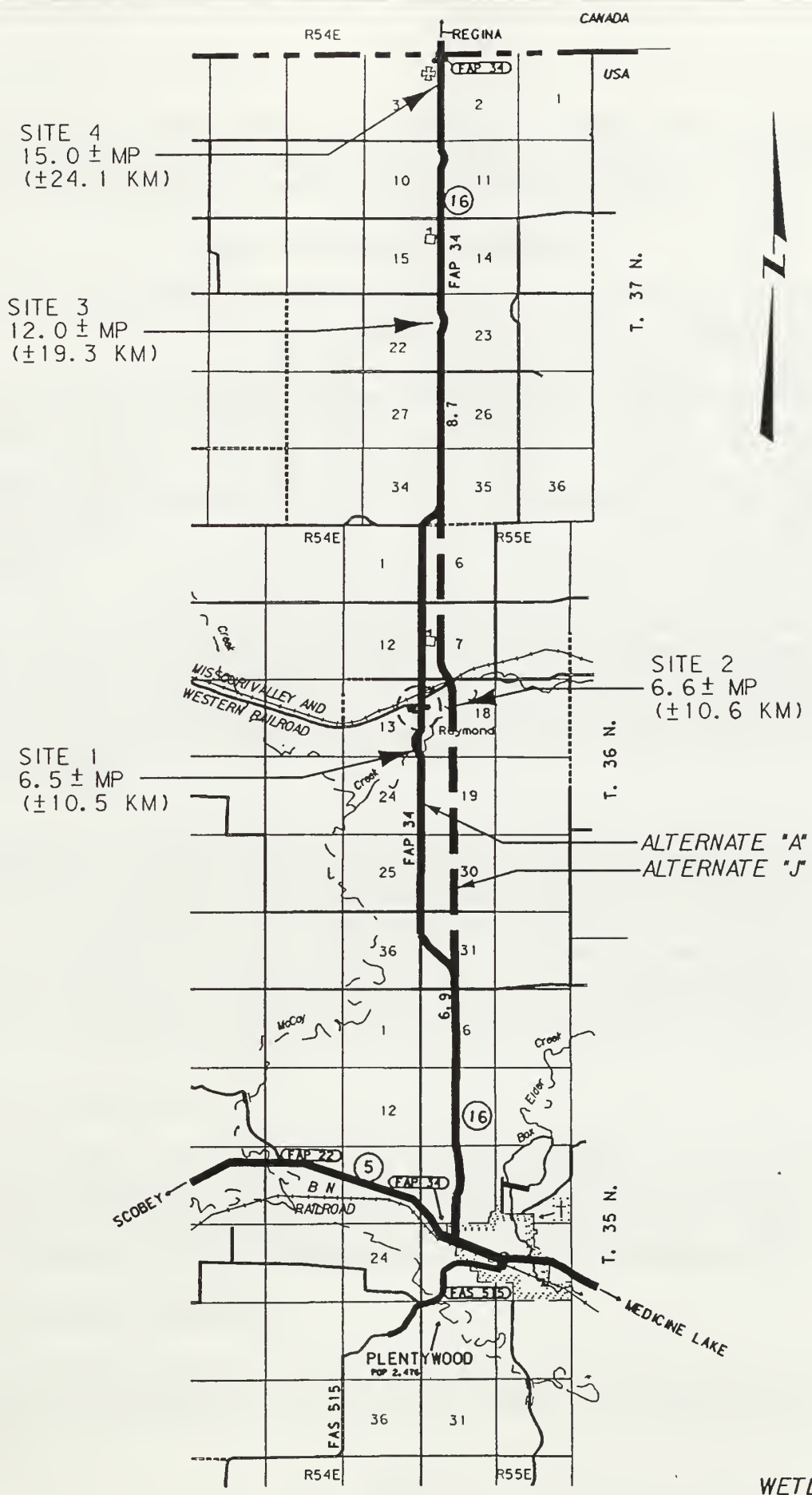
The Montana Interagency Wetlands Group reviews proposed projects with the following objectives.

1. To avoid or minimize the loss of wetlands and their functions and values due to highway construction impacts.
2. To obtain effective, high quality mitigation for unavoidable losses of wetlands functions and values by evaluating proposed highway projects early in the planning process.
3. To expedite highway project development by minimizing administration delays and coordination requirements.
4. To satisfy the requirements of applicable state and federal environmental regulations and directives pertaining to wetlands.
5. To establish a process to ensure the early involvement of concerned agencies in addressing wetlands impacts due to highway construction.

A wetlands evaluation has been completed and submitted to the Interagency Wetlands Group for review. It is on file at the Helena offices of the Montana Department of Transportation. The response from the Montana Department of Fish, Wildlife and Parks, a member of the Interagency Wetlands Group, is included in Appendix "B".

There were four wetland sites found in the project area (see Figure 9). Two were on the northern end of the project, one was located below the Raymond Reservoir on Alternate "A" and one was just above the Raymond Reservoir on Alternate "J".

- Site 1 is located near Milepost 6.5± on Alternate "A" just below the Raymond Reservoir. The site is classified as having a seasonal or permanent high water table with herbaceous type vegetation. It is a common wetland area. Design and construction will utilize appropriate procedures to minimize impacts to the wetlands if Alternate "A" is selected. Mitigation measures will be implemented to compensate for the estimated 0.71± acres (0.290± Ha) of disturbed wetlands. The proposed alignment crosses this wetland, which is along a drainage way located on both sides of the existing alignment and proposed alignment. No practical alternative exists which would avoid this wetland area.
- Site 2 is located near Milepost 6.6± along the preferred Alternate "J" just above the Raymond Reservoir. This site is classified as having "seasonal or permanent high water table with shrubs as the primary vegetation type". It is a common wetland area of high quality. Design and construction will minimize impacts to this wetland if Alternate "J" is selected. Mitigation measures will be implemented to compensate for the estimated 0.36± acres (0.145± Ha) of disturbed wetlands. The proposed alignment crosses this wetland, which is along a drainage way located on both sides of the existing alignment and proposed alignment. No practical alternative exists which would avoid this wetland area.
- Site 3 is located near Milepost 12.0±. This site is rated as a high quality wetland. Avoidance of this wetland is possible and design will proceed with the alignment curving east of the site. No wetland areas will be disturbed at site 3.
- Site 4 is located near Milepost 15.0±. The site doesn't contain any open water and is of little value to wildlife. At this location, the highway is following the existing alignment and the only affect on the wetland will be the wider typical section. It is estimated that 0.57 ± acres (0.232± Ha) will be disturbed and require mitigation. This wetland occurs in both sides of the existing alignment. The existing alignment and Port of Raymond improvements (located approx. 0.5 miles north) restricts practical alternatives to the existing highway corridor.



WETLANDS SITES

FIGURE 9

The exact amount of wetlands that will be affected by the project will not be accurately determined until final design is completed. There will be some effect on wetlands with each alternate. The following table summarizes the estimated affected wetlands.

AREA OF WETLANDS AFFECTED

	Alternate "A"		Alternate "J"	
	Acres	Hectares	Acres	Hectares
High Quality Wetlands	0.71	0.290	0.36	0.145
Poor Quality Wetlands	0.57	0.232	0.57	0.232
TOTAL AFFECTED WETLANDS	1.28	0.522	0.93	0.577

The project area is included in a North American Waterfowl Management Plan joint venture project area. Wetlands and adjacent upland habitats within Sheridan County have been targeted for enhancement and restoration activities. Mitigation of any unavoidable wetland impacts is required by the Corps of Engineers. A Wetlands Mitigation Plan will be prepared and submitted to the Corps for project authorization under Section 404 of the Clean Water Act prior to construction activities.

On site mitigation for affected wetlands on the project is possible at wetlands site 3. The proposed alignment is shifted east of the existing roadway to avoid impacting this high quality wetland. This will leave potential for expanding the existing wetland in the excess existing right of way. The creation of wetlands would be integrated into the process of obliterating the existing roadway. The proposed replacement wetlands would be shallow (2-3 feet) with an irregular shoreline and flat slopes transitioning from the banks to the water. It is estimated that 1 acre of wetlands can be obtained at this site. Other sites for mitigation may become available as design and right of way negotiations proceed.

FLOOD HAZARD IMPACTS

No Federal Emergency Management Agency delineated floodplains are located along the construction corridor for this project. No major drainages are crossed by this project. Both alignments cross the drainage in which the Raymond Reservoir is located. Impacts to the floodplain associated wetlands are discussed in the section covering Wetland Impacts.

FISH AND WILDLIFE IMPACTS

A Rare and Sensitive Species Report; Biological Report and Biological Assessment have been completed for this project and are on file in the Helena office of the Montana Department of Transportation.

The U.S. Fish and Wildlife Service (USFWS) has been consulted regarding the presence of threatened or endangered species in the project area. The USFWS has determined that six species on the Federally listed Endangered and Threatened Species occur or may occur within the project area. They are the black-footed ferret, bald eagle, peregrine falcon, piping plover, least tern and the whooping crane.

Power lines can result in electrocution hazards for the bald eagle and other perching birds, such as the peregrine falcon. To minimize this impact, all power lines that require modification or reconstruction as a result of this project will be raptor-proofed following the criteria and techniques outlines in the Raptor Research Report, No. 4, "Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1981".

The lack of any evidence of regular use of the area by any of the threatened or endangered species reported to use the area, conversations with MDFW&P biologists, correspondence with the USFWS, a field review, and the nature of the project would lead to the conclusion that this project would not have a direct affect on these species, or critical habitat used by these species. A description of each of these species and their habitat is provided in the Rare and Sensitive Species Report, Biological Assessment and Biological Reports for this project. These reports are included in Appendix C. The findings of this report regarding the proposed project affects (if any) on threatened and endangered species have been submitted by the MDT's Resources and Permitting Section to the USF&WS for their concurrence. (The reports concluded that the project would not have a direct affect on Threatened or Endangered species).

The Montana Natural Heritage Program (MNHP) has no records of any rare, or sensitive plants in the vicinity of this proposed project. The MNHP did provide a list of plant and animal Species of Special Concern (SSC) in Montana. No rare or sensitive plant or animal species were found in a biological field review of this area.

Rare and sensitive plants are not likely to occur due to the extensive disturbance from farming. Therefore, this proposed project will have no impact on rare or sensitive plant or animal species.

The only fishery in the vicinity of this proposed project is the Raymond Reservoir (see Figure 7). The fish species found in the lake are Northern Pike and Yellow Perch. Alternate "A" will not adversely affect this reservoir since the new alignment will be farther west (downstream) than the existing alignment. Alternate "J" will miss the reservoir, but cross the channel feeding it. Precaution will be made during design and construction to minimize any adverse affect to the fish or reservoir. The MDT Standard Operating Procedures for Erosion Control and project standard Erosion Control Workplan (see section of Water Quality Impacts) will be followed. Grades and slopes will be designed, to minimize the construction area and exposed earth will be revegetated or mulched as soon as practical following construction.

Preliminary plans (when available will be provided to the MDFW&P and COE for concurrence in the design of the stream crossing.

CONSTRUCTION IMPACTS

Construction related activities will result in some short term adverse impacts which cannot be avoided. The impacts will be temporary in nature and will only last for the duration of the construction activities.

Construction related impacts will include:

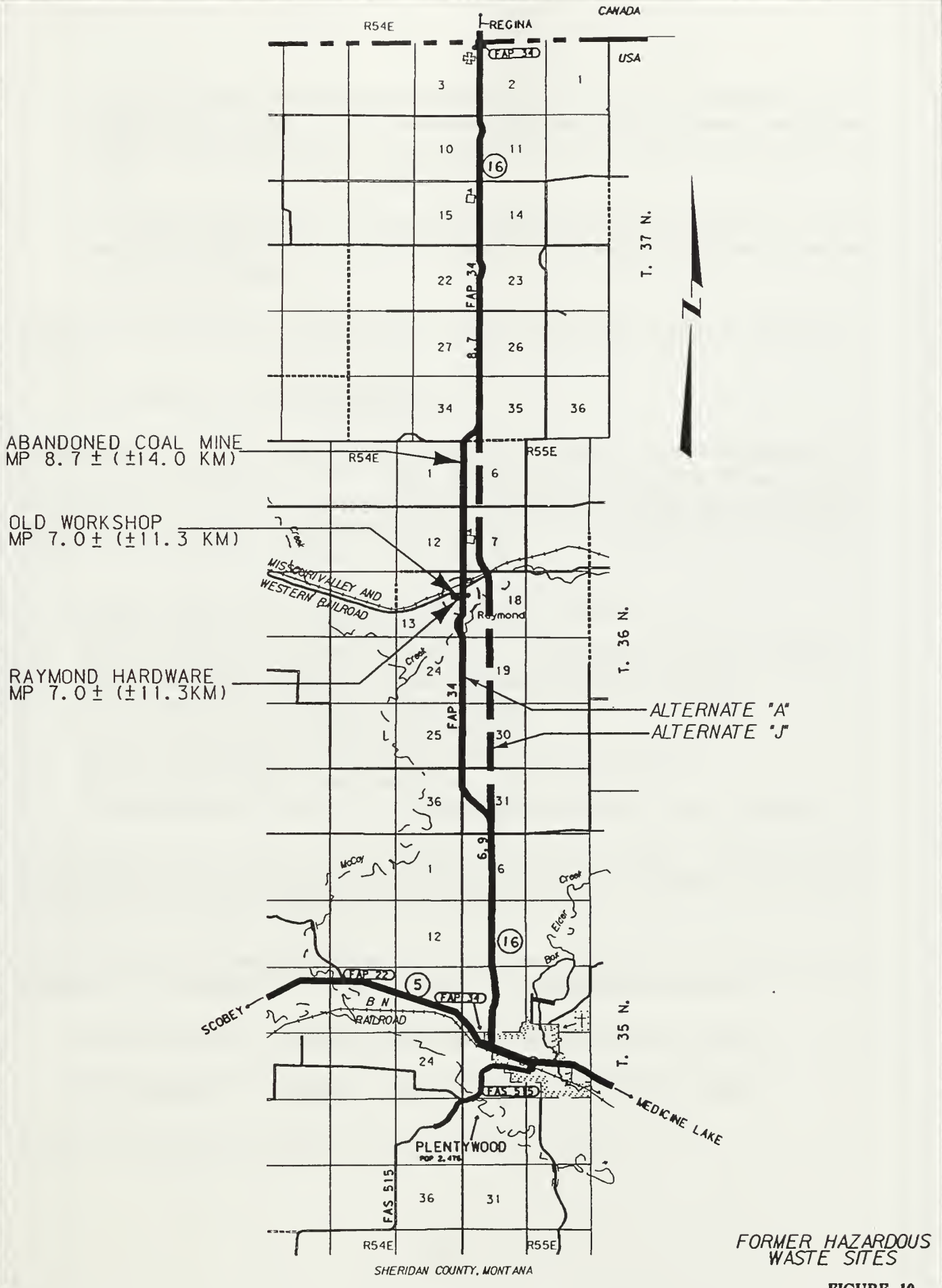
- emissions from asphalt and concrete plants and crushers
- dust and emissions from construction equipment activities
- increased noise levels from construction equipment
- inconvenience to roadway users from delays, detours, and temporary surfacing
- inconvenience to business located along the project resulting from disruptions to and relocated access
- inconvenience to property owners along detour routes resulting from increased noise, emissions, and traffic

These adverse impacts will be minimized to the extent practical through proper construction practices and planning of detours and construction zones. Air quality permits from the State Air Quality Bureau will be required for asphalt plants and crushers. Dust will be controlled by watering or other acceptable methods. A traffic control plan and construction plan will be developed to minimize inconvenience and impacts to motorists, businesses and property owners during construction.

HAZARDOUS WASTES

The Montana Department of Transportation has investigated possible hazardous waste sites (see Figure 10). All possible hazardous wastes were located along Alternate "A". If Alternate "A" were selected, all identified sites would be tested, with mitigation of hazardous wastes that are encountered. No potential hazardous waste sites were found on Alternate "J", the preferred alternate. Potential hazardous waste sites identified include:

1. An underground storage tank was within the existing R-o-W at the Raymond Hardware store, and was removed by a private party in mid-1992. A licensed Hazardous Waste consultant retained by MDT determined that no hydrocarbon contamination is present. A report on this site will be submitted by the tank's owner of record to the Montana Dept. of Health & Environmental Science's Large Underground Storage Tank program manager.



FORMER HAZARDOUS WASTE SITES

FIGURE 10

2. An abandoned coal mine is located in the NW¼NW¼, Section 6, T36N,R55E (right of MP 8.7± on Alternate "A"). The site was reclaimed in 1986 by the Department of State Lands. The proposed alignment is shifted away from the site, and no adverse affects will occur.
3. The final identified site is an old work shop located adjacent to Alternate "A" on the south end of Raymond. The licensed Hazardous Waste consultant examined this site and found no contamination.

There are no known potential hazardous waste sites identified along the preferred Alternate "J" corridor.

V. COMMENTS AND COORDINATION

Coordination efforts were initiated by the engineering consultant and Montana Department of Transportation on November 27, 1991, when a letter of intent was issued to federal, state and local agencies, and affected private organizations. Comments and information were requested which would be relevant to the project. The following is a list of the agencies which responded. Copies of their responses are included in Appendix "B".

- Montana Dept. of Fish, Wildlife & Parks, Helena, Montana
- MDT - Aeronautics Division, Helena, Montana
- Dept. of Health and Environmental Sciences, Air Quality Bureau, Helena, Montana
- United State Dept. of Interior, National Park Service, Denver, Colorado
- MDT - Rail & Transit Division, Helena, Montana
- Dept. of State Lands - AMRB, Helena, Montana
- Montana Department of Fish, Wildlife & Parks, Glasgow, Montana
- Dept of Natural Resource and Conservation, Helena, Montana
- State Historic Preservation Office, Montana Historical Society, Helena, Montana

An information meeting was conducted Tuesday, December 10, 1991, 7:00 p.m. at the Plentywood Civic Center to discuss the project with the public and solicit input. A summary of the Informational Hearing is included in Appendix "B".

Since the Information Meeting (December 10, 1991), numerous letters and petitions supporting Alternate "A" or Alternate "J" have been received. A summary of the comments is"

For Alternate "A" - 19 letter or comment forms and 57 names on a petition.

For Alternate "J" - 11 letters or comment forms and 450 names on petitions.

Copies of the petitions are on file at the Helena office of the MDT.

The engineering consultant contacted landowners along the project the first week of March, 1992 to obtain right-of-entry permits and discuss project concerns.

An open public hearing was held Wednesday, January 13, 1993 from 4:00 to 6:00 p.m. The meeting discussed the general design and studies of the alternates ("A", "J" and "No Build"). A record of the meeting results is on file at the Helena office of the MDT. Of the written comments received, 7 favored Alternate "J" and 6 favored Alternate "A".

VI. PROGRAMMATIC SECTION 4(f) EVALUATION

This programmatic section 4(f) evaluation is part of the Environmental Assessment for Plentywood North. A programmatic section 4(f) evaluation is being used for the following reasons:

1. Only a minor amount of right of way is required.
2. The taking of the 4(f) land does not impair the use of the facility.
3. The 4(f) site is adjacent to the existing road facility.
4. Officials with jurisdiction over the property have agreed with assessment of impacts and mitigation.

Preliminary designs have been analyzed to the extent that right of way and construction easements will be required from the Plentywood Golf Course. Both Alternates (A&J) are on the same alignments in the vicinity of the golf course.

The Golf Course is administered by the Plentywood Golf Club on land leased from the City of Plentywood and Sheridan County (see Figure 11 & 12).

General.

Section 4(f) of the 1966 U.S. Department of Transportation Act (49 U.S.C. 303) states that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and wildfowl refuges, and historic sites. Section 4(f) requirements are applicable if a proposed roadway project requires the use of any publicly owned land from a public park, recreation area, wildlife and waterfowl refuge of national, State or local significance or any land from an historical site of national, State, or local significance.

In addition, the requirements of Section 4(f) are stated in 23 CFR Subsection 771.135 as follows:

- (a)(1) The administrator may not approve the use of land from a significant publicly owned park, recreation area or wildlife and waterfowl refuge or any significant historic site unless a determination is made that:
 - (i) There is no feasible and prudent alternative to the use of land from the property; and

(ii) The action includes all possible planning to minimize harm to the property resulting from such use.

The purpose of the following programmatic section 4(f) evaluation and accompanying writeup is to identify potentially affected properties, assess the impacts and demonstrate that the project complies with Section 4(f) requirements. The affected Plentywood Golf Course is located in Section 18, Township 35 North, Range 55 East, P.M.M., Sheridan County, Montana.

Description of Affected Lands.

The Plentywood Golf Course is operated by the Plentywood Golf Club. The course is built on land leased from the City of Plentywood and Sheridan County. The northern portion of the course is constructed on land leased from Sheridan County and the southern portion on land leased from the City of Plentywood. The portion built on city land received assistance from the Land and Water Conservation Fund Act (16 U.S.C. 460) (L&WCF) and the property is subject to the provisions of Section 6(f) of the L&WCF Act as amended.

The L&WCF money was used to acquire the 34.20 acres and for development work consisting of turf irrigation system with pump and well, site preparation, landscaping, water storage, reservoirs, fencing, storage building, rain shelters, installation of greens, seeding and fertilizing fairways and other necessary facilities.

Sheridan County owns the N $\frac{1}{2}$ SE $\frac{1}{4}$ Section 18, Township 35 North, Range 55 East, P.M.M. A portion of this 80 acre tract is leased to the Golf Club and the remainder is farmed by the adjoining landowner. No records area available in the County Courthouse that provides an actual description on area of the land used by the golf course. By scaling aerial maps, it appears that approximately 60 acres are being used for golf course purposes. (See Figure 11)

The City of Plentywood land consists of 34.20 acres located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of said Section 18. A copy of the deed and a letter from the MDFW&P concerning the L&WCF land and uses is enclosed in Appendix B. Figure 11 shows the affected property boundaries. (See Figure 11)

No right of way is required from the lands covered by Section 6(f) of L&CF. A temporary construction permit will be required to allow for slope flattening.

Right of way is required from portions of the lands leased from Sheridan County. The golf course is open to the public and is subject to the requirements of Section 4(f).

Impacts.

The required right of way from the golf course is a strip of land 800 feet in length, varying in width from 0 to 40 feet. The total right of way take is approximately 0.5 acres. The total area of the golf course is over 100 acres. The take is less than 0.5% of the total area. The required right of way will remove a portion of a hedge screening the golf course from the highway. No golf course facilities will be impacted. (See Figure 12)

To reduce impacts, in fill sections, the slopes have been flattened using temporary construction permits. The fences will be replaced at their existing locations. This will allow maintenance and mowing of vegetation on the fill slope.

The equivalent cost of lost landscape features and the appraised value of the right of way will be paid as compensation for the impacts to the golf course.

Mitigation.

The required right of way and construction easements are designed to avoid impairing the use of the golf course for its intended purpose. All work will be accomplished in areas considered rough, no greens or fairways will be adversely affected.

In areas of fill, the slopes will be flattened to improve the visual appearance and allow maintenance and mowing of the slopes. The right of way will be maintained at the location of the existing fence line. In cut areas, the ditch section will be maintained at a 10 foot width and the steepest possible back slope will be utilized to reduce right of way needs.

Compensation will be provided for land and improvements required for right of way or disturbed by construction. Compensation at the fair market value will be made for the $0.5 \pm$ acres required for right of way and for any hedge or trees removed from the site. Fair market value will be determined by a qualified appraiser. A formal agreement will be prepared for signature of all involved parties when final impacts are determined.

Alternatives.

No reasonable or prudent alternates are available which would avoid the 4(f) lands.

Shifting the alignment away from the golf course would move the roadway into a large coulee, causing large fills and drainage problems. and would require the relocation of a home site and business.

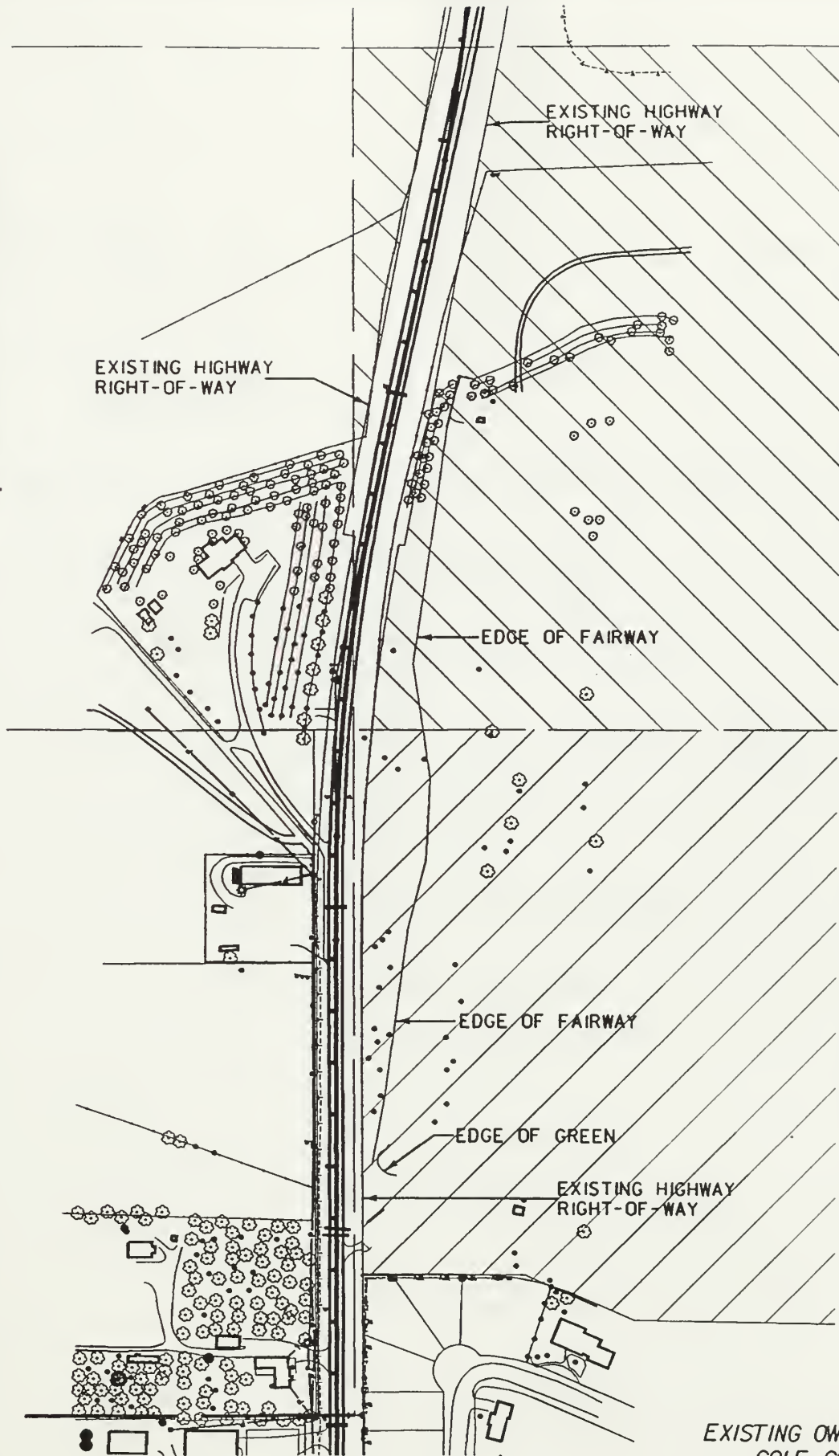
The shift in alignment would move the westerly right of way into the business at station 20+00 left. It would remove the vegetative buffer between the house left of 26+00 and the highway. The fill slope would be within $65 \pm$ feet of the house and encroach on the driveway.

Coordination.

The consultant, the county commissioners and representatives of the golf course and MDT have discussed the impacts and mitigation for the golf course (see letter in Appendix B). All of the previously listed parties are in agreement with the proposed action, therefore, it qualifies under the Nationwide 4(f) Evaluation for minor usage of public parks, recreational lands and wildlife and waterfowl refuge.



SCALE: 1" = 300'

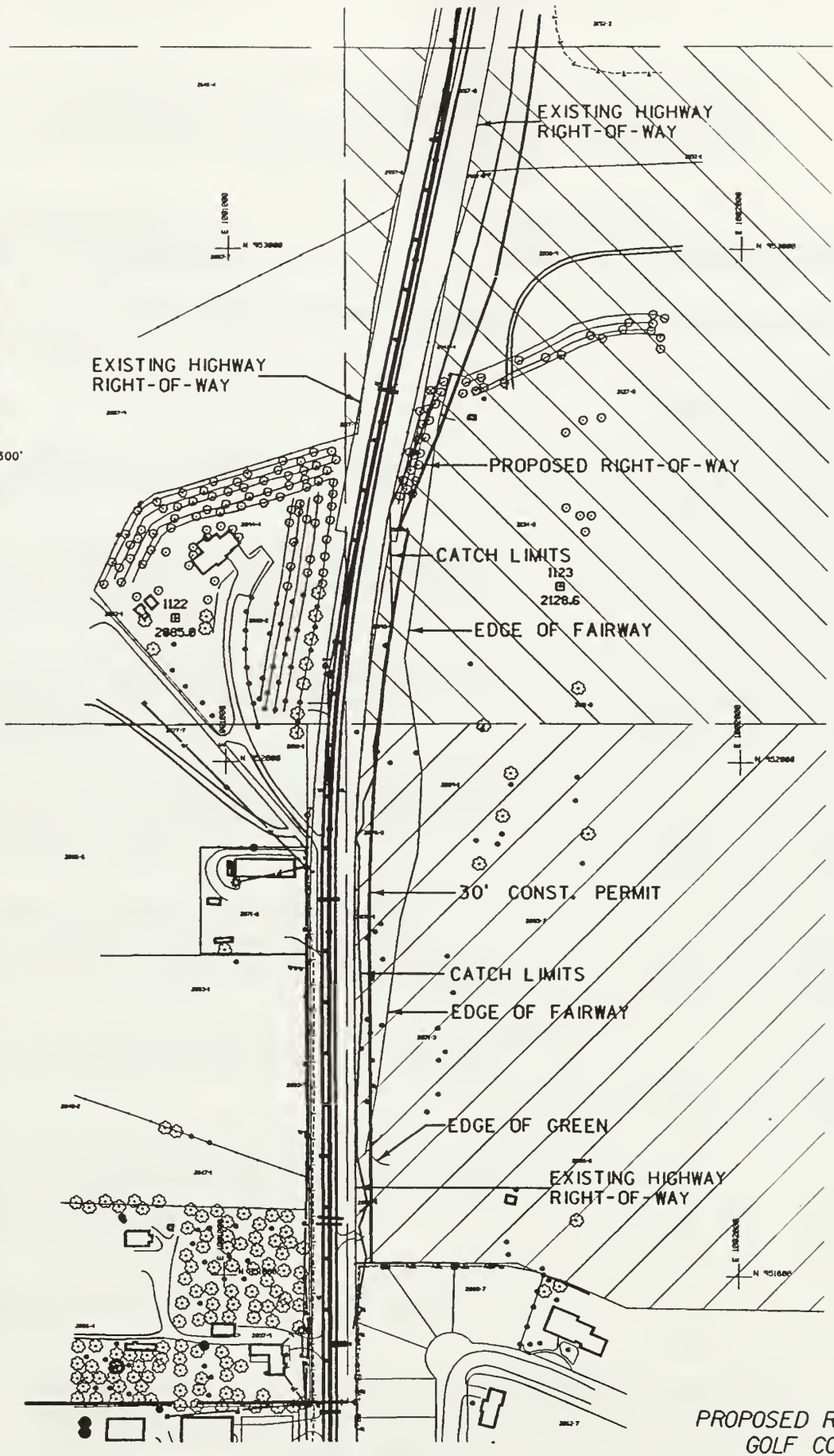


EXISTING OWNERSHIPS
GOLF COURSE

FIGURE 11



SCALE: 1" = 300'



SHERIDAN COUNTY OWNERSHIP

CITY OF PLENTYWOOD OWNERSHIP

PROPOSED RIGHT-OF-WAY
GOLF COURSE

FIGURE 12

MONTANA DIVISION
 NATIONWIDE 4(f) EVALUATION FOR MINOR USAGE OF
 PUBLIC PARKS, RECREATION LANDS AND WILDLIFE AND
 WATERFOWL REFUGES

Project #(1) NH 34-1(2)0
 Project Name (3) Plentywood

Description (2) _____
 Location (4) Sheridan County

Any response in a box requires additional information. Consult the Nationwide 4(f) Evaluation criteria

	<u>YES</u>	<u>NO</u>
1) Is the 4(f) site adjacent to the existing highway?	<u>X</u>	<u> </u>
2) Does the amount and location of the taking impair the use of the remaining Section 4(f) lands for its intended purpose?	<u> </u>	<u>X</u>
3) Does the proposed project require more than a <u>minor</u> amount* of the Section 4(f) for right-of-way?	<u> </u>	<u>X</u>
4) Are there any proximity impacts which would impair the use of the 4(f) lands for their intended purpose?	<u> </u>	<u>X</u>
5) Have the officials with jurisdiction over the property agreed in writing with the assessment of impacts and proposed mitigation?	<u>X</u>	<u> </u>
6) Have federal funds such as NL&WCF 6(f), been used in the acquisition of improvements of the 4(f) site?	<u> </u>	<u>X</u>
If yes, has the land conversion/transfer been coordinated with the appropriate federal agency, name _____ and are they in agreement?	<u> </u>	<u> </u>
7) Does the project require the preparation of an EIS?	<u> </u>	<u>X</u>

*Note: MDOH defines a "minor amount" as being not more than 10% of a site under 10 acres in size; 1 acre of a site 10 to 100 acres in size; or 1% of a site greater than 100 acres in size.

Any response in a box requires additional information. Consult the Nationwide 4(f) Evaluation criteria.

	<u>YES</u>	<u>NO</u>
8) Is the project on new location?	<u> </u>	<u> X </u>
9) The scope of the project is one of the following:	<u> X </u>	<u> </u>
a) Improved traffic operations		
b) Safety improvements		
c) 3R		
d) Bridge replacement on essentially the same alignment		
e) Addition of lanes		

ALTERNATIVES CONSIDERED

1) The do nothing alternative has been evaluated and is considered not to be feasible and prudent.	<u> X </u>	<u> </u>
2) An alternative has been evaluated which improves the highway without any 4(f) taking and it is considered not to be feasible and prudent.	<u> X </u>	<u> </u>
3) An alternative on new location avoiding 4(f) taking has been evaluated and is considered not to be feasible and prudent.	<u> X </u>	<u> </u>

MINIMIZATION OF HARM

1) The project includes all possible planning to minimize harm.	<u> X </u>	<u> </u>
2) Measures to minimize harm include the following:		
a) Replacement of lands used with lands of reasonably equivalent usefulness and location, and of at least comparable value.	<u> </u>	<u> X </u>
b) Replacement of facilities impacted including sidewalks, paths, benches, lights, trees, and other facilities.	<u> </u>	<u> X </u>

Any response in a box requires additional information. Consult the Nationwide 4(f) Evaluation criteria.

	<u>YES</u>	<u>NO</u>
c) Restoration and landscaping of disturbed areas.	___	<u>X</u>
d) Special design features.	<u>X</u>	___
e) Payment of the fair market value.	<u>X</u>	___
f) Improvements to the remaining 4(f) lands equal in cost to the fair market value.	___	<u>X</u>
g) Other measures.	___	<u>X</u>

COORDINATION

1) The proposed project has been coordinated with the federal, state, and/or local officials having jurisdiction over the 4(f) lands.	<u>X</u>	_
2) In the case of non-federal 4(f) lands, the official with jurisdiction has been asked to identify any federal encumbrances and there are none.	<u>X</u>	_
3) For bridge replacement projects, coordination with the U.S. Army Corps of Engineers has been completed or a Section 404 Permit application is pending (if applicable).	<u>NA</u>	_

SUMMARY AND APPROVAL

The project meets all criteria included in the Programmatic 4(f) evaluation approved on December 23, 1986.

All required alternatives have been evaluated and the findings made are clearly applicable to this project.

This Programmatic Evaluation includes all possible planning to minimize harm which will be incorporated in the project.

Thomas J. Bernard
For: Edrie L. Vinson, Chief
Environmental and Hazardous Waste Bureau

Date 10-26-93

Approved *Mark Honeywell*
Division Administrator

Date 10-27-93

VII. PREFERRED ALTERNATIVE

The "J" line was selected as the preferred alternative for the following reasons.

1. Straightens Alignment. Alternate "J" has two horizontal curves, while alternate "A" and the no build alternate both have seven horizontal curves.
2. Relocation Impacts. Alternate "J" does not require any relocation of business or residents. Alternate "A" would require the relocation of three structures: a metal grain bin, a former motel which is currently used as a residence and the former Raymond Hardware Store. The Raymond Hardware Store -24SH737 is eligible for inclusion on the National Register of Historic Places.
3. Hazardous Waste Sites. No potential hazardous waste sites have been identified along Alternate "J". Three potential hazardous waste sites have been identified along Alternate "A".
4. Wetlands. Alternate "J" would affect 0.35 acres less of high quality wetlands than Alternate "A".
5. Cultural Resources. Fifteen cultural sites were identified during the investigation. Eight of the sites were found to be eligible for inclusion in the National Record of Historic Places (NRHP). Four of the identified NRHP sites are located along Alternate "J". Nine of the identified NRHP sites are located along Alternate "A". Alternate "J" will not have an adverse affect on any of the identified sites. Alternate "A" would have an adverse affect on three identified sites.
6. Park and Recreation Lands. Two parks are located along the project corridor. Alternate "J" will adversely affect one (the Plentywood Golf Course), requiring a 4(f) Statement. Alternate "A" would affect both sites (Plentywood Golf Course and Raymond Park).
7. Noise Impacts. Alternate "J" will have a favorable noise impact. This alternate moves further away from the town of Raymond and eight individual residents, while moving closer to three homes. Alternate "A" follows the same route as the existing roadway.

Neither alternate would result in adverse affects from noise.

Both Alternate "J" and "A" have similar affects on the remainder of the environmental impacts reviewed.

Alternates "J" has more positive impacts and less adverse impacts than Alternate "A". Therefore, Alternate "J" has been designated as the preferred alternate.

APPENDIX A

LIST OF PREPARERS

THOMAS, DEAN AND HOSKINS, INC.

JACK FISHER, P.E.

MONTANA DEPARTMENT OF TRANSPORTATION

DOUG MORGAN, P.E.
CONSULTANT DESIGN ENGINEER

EDRIE L. VINSON - CHIEF
ENVIRONMENTAL & HAZARDOUS WASTE BUREAU

APPENDIX B

DISTRIBUTION LIST FOR NOTICE OF
AVAILABILITY OF ENVIRONMENTAL ASSESSMENT

Ed Smith, Highway Commissioner
Dagmar, MT 59219

Plentywood Herald
P.O. Box 297
Plentywood, MT 59254

Sheridan County Commissioners
Sheridan County Courthouse
Plentywood, MT 59254

Honorable Glenn Jacobsen
205 W. First Ave.
Plentywood, MT 59254

Sen. Dennis G. Nathe
P.O. Box 4
Redstone, MT 59257

Rep. Linda J. Nelson
H.C. 51 Box 30
Medicine Lake, MT 59247

Plentywood Chamber of Commerce
P.O. Box 4
Plentywood, MT 59254

Sheridan County Planning Board
Attn: Doug Smith
100 W. Laurel Ave. (Courthouse)
Plentywood, MT 59254

Sheridan Co. Extension Office
Sheridan Co. Courthouse
Plentywood, MT 59254

Sheridan Co. Conservation Dist.
558 First Avenue West
Plentywood, MT 59254

State Soil Conservation Serv.
10 East Babcock Street, Rm 443
Federal Building
Bozeman, MT 59715

Elementary & High School #20
100 East Laurel Ave.
Plentywood, MT 59256

U.S. Postmaster
U.S. Post Office
Plentywood, MT 59254

U.S. Postmaster
U.S. Post Office
Raymond, MT 59256

Dakota-Missoula Valley & Western
RR
Attn: Joe Majerus, General Mgr.
2101 E. Broadway
Bismark, ND 58501

Montana Dakota Utilities
106 E. Rail Road
Plentywood, MT 59254

Nemont Telephone Coop. Inc.
P.O. Box 600
Scobey, MT 59623

Sheridan Electric Coop. Inc.
P.O. Box 227
Medicine Lake, MT 59247

Mr. Wes Choc, President
AAA Montana Automobile Assoc.
P.O. Box 4129
Helena, MT 59604

Montana Motor Carriers Assoc.
P.O. Box 1714
Helena, MT 59624

Montana Chamber of Commerce
P.O. Box 1730
Helena, MT 59624

Sierra Club (East)
c/o Sally Hammond
Billings-Yellowstone-Basin Group
2835 Rimview Road
Billings, MT 59102

Montana Wildlife Federation
P.O. Box 6537
Bozeman, MT 59715

University of Montana
Environmental Library
758 Eddy Avenue
Missoula, MT 59801

Department of Natural Resources
and Conservation
Office of the Director
1520 East 6th
Helena, MT 59620

Dept. of Fish, Wildlife & Parks
Stream Protection Coordinator
1420 East 6th Avenue
Helena, MT 59620

Dept. of Health & Env. Sciences
Solid & Hazardous Waste Bureau
836 Front Street
Helena, MT 59620

Dept. of Health & Env. Sciences
Air Quality Bureau
Water Quality Bureau
Cogswell Building
Helena, MT 59620

Dept. of State Lands
Office of the Commissioner
1625 - 11th Avenue
Helena, MT 59620

Environmental Quality Council
Office of the Director
Capitol Station
Helena, MT 59620

Montana Historical society
State Historic Preservation Off.
225 North Roberts Street
Helena, MT 59620

Montana State University
Institute of Applied Research
Bozeman, MT 59715

Department of Transportation
Aeronautics Division
P.O. Box 5178
Helena, MT 59620

Citizens' Advocate Office
Capitol Building
Helena, MT 59620

State Clearinghouse
Lt. Governor's Office
Helena, MT 59620

Governor's Office
Attn: Debbie David
Capitol, Room 221
Helena, MT 59620

U.S. Army Corps of Engineers
c/o DNRC/CDD
1520 East Sixth Avenue
Helena, MT 59620-2301

U.S. Department of the Interior
U.S. Geological Survey, WRD
Federal Building, Room 428
301 S. Park, Drawer 10076
Helena, MT 59626

Department of Transportation
Federal Aviation Administration
Airports District Office
FAA Building, Room 2
Helena, MT 59601

U.S. Fish & Wildlife
Montana Office
Enhancement Division
Mr Kemper McMaster, Field Supr.
Federal Building
301 South Park
Helena, MT 59626

Bureau of Land Management
222 N. 32nd Street
P.O. Box 36800
Billings, MT 59107

Bureau of Reclamation
Project Manager
Montana Projects Office
P.O. Box 30137
Billings, MT 59107-0137

U.S. Department of Energy
Bonneville Power Administration
Anthony R. Morrell,
Environmental Manager
P.O. Box 3621-SJ
Portland, OR 97208

U.S. Department of the Interior
Office of Environmental Affairs
P.O. Box 25007 (D-108)
Building 56, Room 1018
Denver Federal Center
Denver, CO 80225-0007

U.S. Department of Agriculture
State Soil Conservationist
10 E. Babcock
Room 443, Federal Building
Bozeman, MT 59715

Federal Emergency Mgmt Agency
Region VIII
Denver Federal center
Building 710
Denver, CO 80225

Federal Housing Administration
Office of the Director
Housing & Urban Development
Federal Office Building
301 South Park, Drawer 10095
Helena, MT 59626

U.S. Department of Agriculture
U.S. Forest Service, Region 1
ATTN: Regional Forester
P.O. Box 7669
Missoula, MT 59801

U.S. Department of the Interior
National Park Service
Branch of Compliance, RMRO-PC
Box 25287, Denver Federal Center
Denver, CO 80225

U.S. Department of the Interior
Director, Office of Env. Affairs
1849 C. Street N.W.
Washington, DC 20240-0001

U.S. Department of the Interior
Chief-Environment Impact Assess.
U.S. Geo. Survey; MS-104 Program
423 National Center
Reston, VA 22092

U.S. Department of the Interior
Chief, Western Field Oper. Center
Bureau of Mines
East 360 - 3rd Avenue
Spokane, WA 99202

U.S. EPA Montana Office
Attn: EIS Review
301 South Park, Drawer 10096
Helena, MT 59626

E.P.A. Region 8
Environmental Review Coordinator
One Denver Place
949 - 18th Street
Denver, CO 80202-2405

U.S. Dept. of Transportation
United States Coast Guard
Commander (OAN)
13th Coast Guard District
915 Second Avenue
Seattle, WA 98174

U.S. Fish & Wildlife Service (ES)
1501 - 14th Street West
Suite 230
Billings, MT 59102

Director, Federal Agency
Liaison Division
Office of Federal Activities
EPA Environmental Review
Coordinator
Washington, D.C. 20460

American Wilderness Alliance
C.R. Merritt, Executive Director
746 Sawyer Lane
Hamilton, MT 59840

Montana Automobile Association
P.O. Box 4129
Helena, MT 59604

D. S. Johnson

Montana Department of Fish, Wildlife & Parks

1420 East Sixth Avenue
Helena, Montana 59620
October 28, 1992

Ms. Edrie L. Vinson
Environmental & Hazardous Waste Bureau
Department of Transportation
2701 Prospect Avenue
Helena, Montana 59620

Date Recd. Preconst. 11-16-92	
Act	MAIL ROUTE
Info	30 Preconst Engr
	30 Assistant
	30 Office Mgr
	32 Safety Engr
	32 Road Design
	33 Environment
	34-100 Pikes
	35 Survey & Mapping
	36 Traffic Eng.
	37 Traffic Operations
	38 Consultant Dsn.



MASTER FILE
COPY

cc: G. L. Larson
Edrie Vinson
Jeff Berglund
D. S. Johnson
Jim Hill

Dear Edrie:

I have reviewed the correspondence submitted to this office concerning several wetland related projects. My comments will be listed by project.

Wetland Fill-Maintenance Activity - Hwy 69 Boulder South.: The proposal to add a culvert extension is satisfactory and the wetland impact can be added to the ledger. The requirement for a wetland assessment can be waived in this case.

Flathead River Bridge - Creston North Mitigation proposal. The concept proposed by MDFWP Region 1 Fisheries has merit especially as a cooperative venture. However, there are many variables that need to be explored prior to acceptance as a mitigation proposal. Landowner contacts need to be pursued to determine their acceptance of the proposal. Potential engineering concerns including dike construction and maintenance, especially adjacent to the river, suitable water control structures, and the possible use of supplemental flows from Mill Creek to augment pond levels should be addressed.

My recommendation is for MDOT to pursue this opportunity and work with Brian Marotz as the department contact. Brian can proceed with landowner contacts as step one in this process. Additional technical expertise can be included as the project unfolds. I would caution MDOT that this project appears to be expensive and somewhat complicated, and could take some time to put together.


Plentywood North - This area is included in a North American Waterfowl Management Plan joint venture project area. Wetlands and adjacent upland habitats within Sheridan County have been targeted for enhancement and restoration activities. Extended drought has affected the quantity and quality of wetland basins and grassland habitats and the wetland assessment underestimates the importance of these prairie pothole complexes. We consider mitigation of any

of these prairie pothole complexes. We consider mitigation of any unavoidable wetland impacts to be a high priority and request that a mitigation package be assembled prior to construction activities.

In reviewing the wetland ledger, we have some questions on the status of projects that were listed in the ledger. What were the wetland impacts associated with the Malta - West job, what mitigation activities were proposed and what was completed? Has there been any progress on the Busby - North and South mitigation work? MDOT had proposed to use the Gray-Robbins pits as banked mitigation for the Simms - West project. A site inspection provided some preliminary recommendations as to the suitability of these pits for mitigation purposes. What is the status of this project.

If you have any questions please give me a call.

Sincerely,



Jeff Herbert
State Waterfowl Coordinator

1028.1
tlp

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 11/4/97	
Name Of Project Plentywood-North F34-1(2)0		Federal Agency Involved USDA - Federal Highway Administration	
Proposed Land Use highway right-of-way		County And State Sheridan County, Montana	
PART II (To be completed by SCS)		Date Request Received By SCS	

Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form.)		Yes <input type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crops	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %		Name Of Land Evaluation System Used	
Name Of Local Site Assessment System		Date Land Evaluation Returned By SCS			

PART III (To be completed by Federal Agency)	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	227	297		
B. Total Acres To Be Converted Indirectly	0	0		
C. Total Acres In Site	227	297		

PART IV (To be completed by SCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by SCS) Land Evaluation Criterion				
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI (To be completed by Federal Agency)	Maximum Points			
Site Assessment Criteria (These criteria are explained in 7 CFR 658.51b)				
1. Area: Nonurban Use	15	15	15	
2. Perimeter In Nonurban Use	10	10	10	
3. Percent Of Site Being Farmed	20	18	19	
4. Protection Provided By State And Local Government	20	0	0	
5. Distance From Urban Builtup Area	(N/A)	0	0	
6. Distance To Urban Support Services	(N/A)	0	0	
7. Size Of Present Farm Unit Compared To Average	10	10	10	
8. Creation Of Nonfarmable Farmland	25	0	0	
9. Availability Of Farm Support Services	5	4	4	
10. On-Farm Investments	20	1	1	
11. Effects Of Conversion On Farm Support Services	25	0	0	
12. Compatibility With Existing Agricultural Use	10	0	0	
TOTAL SITE ASSESSMENT POINTS	160	58	59	

PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)	100	100	100	
Total Site Assessment (From Part VI above or a local site assessment)	160	58	59	
TOTAL POINTS (Total of above 2 lines)	260	158	159	

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
----------------	-------------------	--

Reason For Selection:

D. S. Johnson

State Historic Preservation Office Montana Historical Society

Mailing Address: 225 North Roberts • Helena, MT 59620-9990
Office Address: 102 Broadway • Helena, MT • (406) 444-7715

October 13, 1992

Edrie Vinson, Chief
Environmental and Hazardous Waste
Montana Department of Transportation
2701 Prospect Avenue
Helena, MT 59620

RE: Plentywood-North
(F 34-1(2)0)

Dear Edrie:

Thank you for requesting our review and comments for the cultural resource inventory referenced above. It was one of the best reports we have seen from GCM of late, with good context and evaluations of property types clearly defined and justified. We are happy to concur with their recommendations, and the additional evaluation provided by your staff, to wit:

We concur that both of the prehistoric sites recorded, 24SH886 and 24SH874, appear to retain sufficient integrity and potential to yield dateable subsurface remains to contribute to our knowledge of aboriginal settlement patterns in this region of NE Montana to qualify for listing under Criterion D.

Of the newly recorded historic sites, we concur that 24SH878, 875 and 877 will qualify under criteria A and C as contributing elements in a WPA dam and reservoir multiple properties listing.

We also concur that the Tim Syme Place (24SH884) is eligible under Criterion D for its potential to yield information on the material culture of schoolchildren in Raymond from 1914-1948.

- The Paulson Place (24SH881) is eligible under C for its clear representation of an early Raymond homestead complex;

-The Port of Raymond (24SH876) will qualify under Criterion A, although we agree that too many alterations (however sympathetic, and these certainly were) have occurred to the Port in the modern era for it to retain sufficient integrity to qualify under C;

Recd. Preconst. 10-14-92

MAIL ROUTE	Attach	Initial
30 Preconst Engr		
30 Assistant		
30 Office Mgr		
31 Safety Mgmt.		
32 Road Design		
33 Environment		
34 Hydraulics		
35 Survey & Mapping		
36 Traffic Eng.		
37 Traffic Operations		
39 Consultant Den.		
File		

MASTER FILE COPY

cc: D. S. Johnson
D. J. Lowdy

Edrie Vinson, Chief
October 13, 1992
Page 2

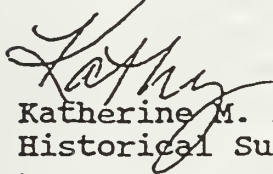
-That Karl's Midway Tavern (24SH880) will qualify under
Criteria A and C.

Of the formerly recorded properties, we agree that the Raymond
Dam (24SH736) will qualify as part of the multiple properties WPA
dams and reservoirs listing. We also concur that the Raymond
Hardware Store (24SH737) qualifies for listing under Criterion A
for its role in demonstrating the commercial history of Raymond.

We also agree with the consultants and your office that
properties 24SH885 (Wollan Place), 24SH882 (church foundation),
24SH883 (Sames Place), and 24SH40, the reclaimed Raymond Mine,
lack sufficient integrity to be eligible for listing. The latter
property, of course, was previously recorded.

Thank you for the opportunity to comment. This was an
interesting group of resources! We will look forward to your
agency finding of effect for this project.

Sincerely,



Katherine M. Huppe
Historical Survey Reviewer

File: Comp/MDOH/project file
CD: 24SH886
24SH874
24SH878
24SH880
24SH884
24SH881
24SH885
24SH877
24SH876
24SH736
24SH737



Montana Department
of Transportation

Aeronautics Division
Box 5178
2630 Airport Road
Helena, MT 59604

Phone (406)444-2506
FAX (406)444-2519

Stan Stephens, Governor

8wB
BKK
117

THOMAS DE...
DEC 16 1991

Avy. Struct. Municipal
JRC
Job No.

December 4, 1991

David S. Johnson, P.E.
Department of Transportation
Highway Division
2701 Prospect Avenue
Helena, MT 59620

Subject: Plentywood-North, F34-1(2)0, CN #1822

Dear Mr. Johnson:

Aeronautics Division can not identify any impacts to aeronautical activities as a result of your planned construction along this project route. We therefore have no objections to its completion.

Thank you for your interest in our comments.

Sincerely,

Michael D. Ferguson, Administrator
Aeronautics Division

Redge R. Meierhenry
Aviation Representative

pk

Date Recd. Preconst.		12-5-91		
Act	Info	MAIL ROUTE	Attach	Initial
	<input checked="" type="checkbox"/>	30 Preconst Engr		
	<input checked="" type="checkbox"/>	30 Assistant		
	<input checked="" type="checkbox"/>	30 Office Mgr		
	<input checked="" type="checkbox"/>	31 Safety Mgmt.		
	<input checked="" type="checkbox"/>	32 Road Design		
	<input checked="" type="checkbox"/>	33 Environment		
	<input checked="" type="checkbox"/>	34 Hydraulics		
	<input checked="" type="checkbox"/>	35 Survey & Mapping		
	<input checked="" type="checkbox"/>	36 Traffic Eng.		
	<input checked="" type="checkbox"/>	37 Traffic Operations		
	<input checked="" type="checkbox"/>	39 Consultant Dsn.		
	<input checked="" type="checkbox"/>	File		



United States Department of the Interior

NATIONAL PARK SERVICE

ROCKY MOUNTAIN REGIONAL OFFICE

12795 W. Alameda Parkway

P.O. Box 25287

Denver, Colorado 80225-0287

TAKE
PRIDE IN
AMERICA

IN REPLY REFER TO:

L7619 (RMR-PP)

Mr. David S. Johnson, P.E.
Preconstruction Engineer
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

Dear Mr. Johnson:

We have received your letter of November 27, 1991, regarding the proposed upgrading of Montana Highway 16 beginning in Plentywood, Montana, and extending northerly to the Canadian border.

The proposed reconstruction route from Plentywood north is contiguous to the western edge of the Plentywood Golf Course. Plentywood Golf Course has received assistance from the Land and Water Conservation Fund (L&WCF), and therefore, the property is subject to the provisions of Section 6(f) of the L&WCF Act, as amended. The provisions of the Act stipulate that changes from outdoor recreation use be approved by the Secretary of the Interior and require the substitution of other properties of at least equal fair market value and reasonably equivalent usefulness and location for the recreation lands to be taken.

The Montana Parks Division has responsibility for administering the L&WCF within the State of Montana. We note from your mailing list that they have been notified of this project. Please maintain contact with the parks division to assure compliance with 6(f) requirements.

In addition, if the proposed project will receive Federal funding and will use land from the Plentywood Golf Course for right-of-way or easements, it will be necessary to comply with the provisions of Section 4(f) of the Department of Transportation Act, as amended, and prepare a Section 4(f) determination.

Sincerely,

Michael D. Snyder
Acting Associate Regional Director
Planning and Resource Preservation

Date Recd. Preconst. 12-12	
Act	Info
	MAIL ROUTE
	30 Preconst Engr
	30 Assistant
	30 Office Mgr
	31 Safety Mgmt.
	32 Road Design
	33 Environment
	34 Hydraulics
	35 Survey & Mapping
	36 Traffic Eng.
	37 Traffic Operations
	39 Consultant Dsn.
	Attach

DEC 8 1991

8

copy to consultant

DEPARTMENT OF STATE LANDS



STAN STEPHENS, GOVERNOR

CAPITOL STATION

STATE OF MONTANA

(406) 444-2074

1625 ELEVENTH AVENUE
HELENA, MONTANA 59620

August 14, 1991

MEMORANDUM

TO: Edrie L. Vinson, Supervisor
Environmental Section
Highway Department

FROM: Dan Koszuta
DSL - AMRB

RE: Abandoned Coal Mine on F34-1(O), Plentywood North,
known as the Raymond Mine

The abandoned coal mine you inquired about in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 6, T-36N, R-55E in Sheridan County, Montana, was re-claimed in 1986 by the Department of State Lands.

la

8/16/91

✓

✓
Russell

Montana Department
of
Fish, Wildlife & Parks



Rural Route 1 4210

Glasgow, MT 59230

December 20, 1991

DEC 20 1991

Thomas, Dean & Haskins, Inc.
Engineering Consultants
1200 25th Street South
Great Falls, MT 59605

Cwy. Struct. Municipal
JRF

RE: PLENTYWOOD-NORTH F34-1(2)0 CN# 1822

Job No. _____

Dear Sirs:

We have reviewed the plans for Plentywood-North and have the following comments:

Fisheries; Raymond Dam near MP7 has a popular fishery with Northern pike/yellow perch in the reservoir. Neither alternative 1 or 2 appear to affect the reservoir, however alternative 1 with a wider right of way may affect the current access to the reservoir. At present, there are three access points to the reservoir which would be nice to maintain.

No other fisheries impacts appear on this proposed project.

Wildlife habitat; There appears to be three wetland areas that may be affected. A 4-acre wetland at MP12 alternate 1; A 3-4 acre wetland near MP 14 alternate 1; A smaller wetland area near MP7 alternate 2. These wetlands provide pair and brood habitat for waterfowl and whitetail deer use the marsh vegetation (cattails and bullrushes) for hiding and thermal cover.

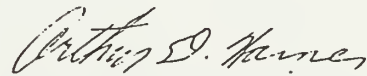
Previous alteration of the first wetland has already destroyed some wildlife habitat. A dike has been constructed across the wetland in an attempt to put some of the wetland area into crop production.

Both of the other sites are intermittent creeks and their adjacent flood plains. These areas provide habitat for waterfowl, deer and upland game birds.

Since mitigation for wetland losses is necessary, the following suggestions should be considered when constructing a new wetland:

- 1) The majority of the wetland should have a maximum water depth of 6 feet or less. Depths of 2-3 feet are ideal for the growth of marsh vegetation. "Dugout" type wetlands should be strictly avoided.
- 2) The shoreline should be long and irregular and there should be a very gentle gradient extending into the water. Steep banks should be avoided.
- 3) The wetland should be located next to suitable nesting cover and away from cropland.
- 4) The wetland should be located within 1 mile to other wetlands.

Sincerely,



Arthur D. Warner
Regional Supervisor

ADW/je

cc: Al Wipperman
Harold Wentland



State Historic Preservation Office Montana Historical Society

Mailing Address: 225 North Roberts • Helena, MT 59620-9990
Office Address: 102 Broadway • Helena, MT • (406) 444-7715

December 2, 1991

Jack Fisher
Thomas, Dean, & Hoskins Inc.
1200 Twenty-Fifth Street South
Great Falls, MT 59405

Re: Plentywood -- North
F34-1(2) 0
CN #1822

TJK
DEC 9 1991

Avy. Great Municipal
JRF

Dear Mr. Fisher:

File No. _____

As requested we have conducted a cultural resource file search for the above cited project. Please find enclosed a computer print-out containing a summary of cultural sites recorded within the townships of your file request. The print-out is organized in numerical order by township and range for easy review. A computer coding sheet guide is also attached to interpret site type and ownership codes. If you have any questions, please give me a call.

Sincerely,

Patrick J. Rennie
Patrick J. Rennie
Archaeological Intern

Enclosures

DFC 4 1991

TA-

Fish and Wildlife Enhancement
301 South Park
P.O. Drawer 10023
Helena, Montana 59626
Federal Building, U.S. Courthouse

FWE-61130-Billings
M.17 FHWA (Plentywood-North)

December 2, 1991

Mr. David S. Johnson, P.E.
Preconstruction Engineer
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

Dear Mr. Johnson:

This responds to your November 27, 1991 letter concerning Montana Department of Highways Project F34-1(2)0 (CN# 1822), Plentywood-North, and requesting identification of the threatened and endangered species that should be considered in connection with this project. Your letter invited other comments we may have.

The Federally-listed endangered and threatened species which occur or may occur within the project area are the black-footed ferret (Mustela nigripes), bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), piping plover (Charadrius melodus), least tern (Sterna antillarum), and the whooping crane (Grus americana). Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the Federal Highway Administration, as the responsible Federal agency, must determine if the proposed actions may affect these endangered species. If you or the Federal Highway Administration determine that any of these species may be affected, it will be necessary to initiate formal consultation with this office. The following information and recommendations may aid you in that determination.

Prairie dog (Cynomys sp.) towns are considered potential habitat for black-footed ferrets. If prairie dog towns are found to occur within the project rights-of-way, surveys for black-footed ferrets may need to be conducted and survey reports submitted to this office for review and concurrence within one year prior to disturbance to the towns. Please contact us for guidelines for conducting ferret surveys if you determine that prairie dog towns or ferrets may be affected by the proposed project.

Both peregrine falcons and bald eagles may occur in the area as spring and/or fall migrants, and bald eagles may occur near by as winter residents. We are not aware of peregrine falcon or bald eagle nest territories in or near the project area. While we do not foresee any substantive issues with the proposed project with regard to the bald eagle and peregrine falcon, any power lines in the vicinity, if not properly constructed, could pose electrocution hazards for these species. To conserve these species and other large raptors protected by Federal law, we urge that any power lines that may need to be modified or reconstructed as a result of the project be raptor-proofed following the criteria and techniques outlined in the Raptor Research Report No. 4, "Suggested Practices for

Raptor Protection on Power Lines - The State of the Art in 1981". A copy may be obtained from:

Jim Fitzpatrick, Treasurer
Raptor Research Foundation
Carpenter St. Croix Nature Center
12805 St. Croix Trail
Hastings, Minnesota 55033.


The June 24, 1991 Preliminary Field Review Report for this project indicates that some wetlands will be impacted. Crossing these wetlands with power lines should be avoided whenever this is at all possible. Where the potential for line strikes by migratory birds appears high, the lines should be rerouted, and if that is not possible, consideration should be given to burying the lines or "marking" any static wires (enlarged lines, marker balls or other means) at the most critical locations.

Also in connection with the wetland impacts, we assume a wetland inventory and impact assessment has or will be completed in accordance with the 1989, "Interagency Memorandum of Understanding: Management and Mitigation of Highway Construction Impacts to Wetlands in the State of Montana". We urge completion of any needed wetland mitigation in full accordance with that Memorandum of Understanding. We also note, in connection with potential wetland encroachments, that the project is in a part of the state where a number of piping plovers are known to nest on barren flats bordering saline lakes in the general area. From the limited information available, it appears the wetlands to be impacted by the project lack shorelines with such characteristics. However, if such barren shoreline areas occur, the possible impacts on nesting plovers needs to be addressed.

We lack the necessary information in this office to determine whether or not the proposed project would cross lands owned or managed by the Service. In this regard, we note that if such lands are involved it would be necessary to obtain a right-of-way from this agency. The appropriate local contact, in such an event, is Medicine Lake National Wildlife Refuge, HC51, Box 2, Medicine Lake, MT 59247.

We appreciate your efforts to consider and conserve fish and wildlife resources, including threatened and endangered species. If you have questions regarding this letter, please contact Mr. Gary Wood of our Billings Suboffice (406) 657-6750.

Sincerely,


Dale Harms
State Supervisor
Montana State Office
FER

JGW/jf

cc: Edrie Vinson, Montana Department of Highways (Helena, MT)
Jack Fisher, P.E., Thomas, Dean & Hoskins Inc. (Great Falls, MT)
Manager, Medicine Lake NWR
Suboffice Coordinator, USFWS, Fish & Wildlife Enhancement (Billings, MT)

"Take Pride in America"



MONTANA NATURAL HERITAGE PROGRAM

1515 East Sixth Avenue
Helena, Montana 59620
(406) 444-3009

December 12, 1991

Jack R. Fisher
Thomas, Dean and Hoskins, Inc.
Engineering Consultants
1200 Twenty-Fifth Street South
Great Falls, MT 59405

Dear Mr. Fisher:

In response to your data request for information on sensitive species in the vicinity of the Plentywood-North highway project; we have checked our databases and currently have no information on sensitive species in that area.

Please remember that the results of a data search by the Montana Natural Heritage Program are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys needed for environmental assesments.

I hope this information is helpful. Let us know if we can be of further assistance.

Sincerely,

Margaret Beer
Data Manager

TKC
DEC 14 1991
JRF
[Handwritten notes and stamps on the right side of the page]

**Montana Department
of
Fish, Wildlife & Parks**



Plentywood North

1420 East Sixth Avenue
Helena, Montana 59620

~~91-99~~
91-99

May 5, 1993

Fred Bente
Consultant Design Section
Montana Department of Transportation
2701 Prospect Drive
P. O Box 201001
Helena, MT 59620-1001

Re: LWCF Project #30-00237 -
Plentywood Golf Course

Dear Fred:

After our phone discussion today, I did another review of the LWCF project file. In 1974, 34.20 acres were acquired using LWCF for expansion of the golf course. The LWCF project also assisted in development work consisting of turf irrigation system with pump and well, site preparation, landscaping, water storage reservoir, fencing, storage building, rain shelters, installation of grass greens, seeding and fertilizing of fairways, installation of necessary facilities for golf play and undergrounding of overhead power wires.

Attached for your information and use is a copy of the warranty deed for the 34.20 acres.

I do have a large map in my project file that shows the greens paralleling what is defined as state highway on the west, the south boundary ends on what appears to be one street north of Highland Avenue. The East boundary has a broken line bordering a "field", and east of that is the Road to Box Elder Lake.

As you can probably determine, my boundary map is somewhat sketchy. What we need to do is define where the acquired 34.20 acres are located in relation to your proposed highway project. If your taking will not take any part of the property described in the enclosed deed, I need to discuss some alternatives with National Park Service. By alternatives, I mean possibly establish an official project boundary map at this time, which could possibly eliminate your proposed .5 acre for highway taking.

In the next few days, I'll discuss the above with the Park Service and let you know what I find.

Let me know if you have questions regarding the above, and I'll be anxious to hear the results of your evaluation of the location of the 34.20 acres.

Call if you have questions - 3750. Thanks Fred.

Sincerely,



MARY ELLEN McDONALD
Program Officer
Operations Bureau
Parks Division

Attachments

MMC/

RCCK 151 245

305.32

STATE OF MONTANA, COUNTY OF SHERIDAN
RECORDED AT 11:00 O'CLOCK, A.M. June 28, 1974
BOOK PAGE 207 RECORDER: ECH 4.00

Ray Myrtle Walker - Deputy

WARRANTY DEED

That ALTA VISTA REALTY COMPANY, a corporation, organized and existing under the laws of the State of Montana in consideration of the sum of Ten and more/100-----Dollars, (\$ 10 & More), the receipt whereof is hereby admitted, does hereby grant, bargain, sell, convey and confirm unto the CITY OF PLENTYWOOD and its heirs and assigns, FOREVER the following described real property situated in the City or Town of Plentywood, County of Sheridan, State of Montana, to-wit:

Beginning at a point 267.0 feet north and 16.0 feet East of the South ¼ corner of Section 18, Township 35 North, Range 55 East, Sheridan County, Montana; thence North parallel to and 16 feet from the North-South ¼ line of said section a distance of 651.9 feet; thence along a curve to the right with a radius of 3786 feet an arc distance of 415.45 feet; thence South 89°52'40" East a distance of 1280.66 feet; thence South 1170.31 feet; thence South 89°28' West a distance of 377.92 feet; thence South 14°40' West a distance of 120.6 feet; thence North 67°02' West a distance of 523.83 feet; thence along a curve to the left with a radius of 500 feet an arc distance of 200.0 feet; thence North 89°57' West a distance of 216.40 feet to the point of beginning.

The above described tract of land lies wholly in the SW¼SE¼ of Section 18, and contains 34.20 acres, more or less.

Subject to prior reservations of all of the oil, gas and other minerals in and under the above described property, together with the right of egress and ingress for the purpose of developing, exploring and removing said minerals.

The grantee shall not sub-divide the property or make any use of the property other than that of a golf course, if the property should ceased to be used as a golf course it shall revert to the party of the first part, the Grantor herein.

TOGETHER, with all and singular the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

An the said GRANTOR hereby covenants that it will forever WARRANT and DEFEND all right, title and interest in and to said premises, and the quiet and peaceable possession thereof, unto the said GRANTEE, its heirs and assigns, against the acts and deeds of said grantor, and all and every person and persons whomsoever lawfully claiming or to claim the same.

IT WITNESS WHEREOF, said GRANTOR has caused its corporate name to be subscribed and its corporate seal to be affixed, by its proper officers, thereunto duly authorized on this 27th day of June, 1974.

ALTA REALTY COMPANY

John J. [Signature]
by _____ President



Montana Department of Fish, Wildlife & Parks

Fax Transmittal Memo

of Pages 1

To: JACK FISHER	From: MARY ELLEN McDONALD
Co.:	Co.: FWP-PARKS DIV
Dept.: THOMAS, DEAN & HOSKINS	Phone # 444-3750
Fax # 727-2872	Fax #

1420 East Sixth Avenue
Helena, Montana 59620

June 14, 1993

Fred Bente
Consultant Design Section
Montana Department of Transportation
2701 Prospect Ave.
P.O. Box 201001
Helena, MT 59620-1001

Re: LWCF Project # 30-00237
Plentywood Golf Course
F 34-2()0 - Plentywood - North

Dear Fred:

After reviewing the map you provided me depicting the LWCF 5(f) boundary and discussing the proposed highway taking with National Park Service, the following determination has been made:

The proposed highway taking is outside the 5(f) boundary, therefore, no LWCF 6(f) conversion of use will occur. Please continue to work with the City of Plentywood to mitigate the 4(f) impacts to the golf course.

If possible, would you send me another copy of the map which illustrates the 6(f) boundary and the proposed area of the golf course taking.

Give me a call at 3750 if you have any questions or want to discuss any of the above.

Sincerely,

Mary Ellen McDonald
MARY ELLEN McDONALD
Program Officer
Operations Bureau
Parks Division

cc: Edrie Vinson, MDT
Glen Jacobsen, Mayor, City of Plentywood
205 W First Ave, Plentywood, MT 59254

NO	MAIL ROUTE	Attach
<input checked="" type="checkbox"/>	30 Preconst Engr	
<input checked="" type="checkbox"/>	30 Assistant	
<input type="checkbox"/>	30 Office Mgr	
<input type="checkbox"/>	31 Safety Mgmt	
<input type="checkbox"/>	32 Road Design	
<input type="checkbox"/>	33 Environment	
<input type="checkbox"/>	34 Hydraulics	
<input type="checkbox"/>	35 Survey & Mapping	
<input type="checkbox"/>	36 Traffic Eng.	
<input checked="" type="checkbox"/>	37 Inst. Operations	
<input type="checkbox"/>	39	

RECEIVED
THOMAS, DEAN & HOSKINS

JFK-18 1993

City of Plentywood

OFFICE OF THE

County Commissioners

SHERIDAN COUNTY
100 W. LAUREL AVENUE
PLENTYWOOD, MONTANA
59284
(406) 765-1660

October 22, 1993

Department of Transportation
Consultant Design Section
Attention: Mr. Fred Bente
Box 201001
Helena, MT 59620-1001

RE: Plentywood North
F34-1(5)0 CN#1822

Dear Mr. Bente:

The County Commissioners and representatives of the Plentywood Golf Club have met at various times with the Project Consulting Engineer (Jack Fisher of Thomas, Dean & Hoskins) to discuss the impacts of the proposed project on the golf course. Sheridan County owns the land from which the right of way is required.

We have reviewed the construction plans and proposed design features included to minimize impacts to the golf course. The impacts to golf course operations will be minimal and will not affect play of the course.

The MDT will pay the Golf Club the equivalent cost of the lost landscape features to mitigate damages. It is estimated that approximately 0.5 acres of right of way from the golf course will be required for the proposed project. The MDT will pay the County the appraised value for the right of way required. This is acceptable to all concerned parties.

When feasible, the proposed project will flatten slopes using a temporary construction permit. The fences will then be replaced at their existing location on the present right of way line. These items will minimize impacts and reduce right of way taken from the golf course.

The County Commissioners and Plentywood Golf Club agree that the above noted design features and mitigation is appropriate for this project.

Department of Transportation
October 22, 1993
Page 2

If you need additional information, please contact the County Commissioners or the Plentywood Golf Club.

SHERIDAN COUNTY COMMISSIONERS

C S Holje
C. S. HOLJE, Chairman

Robert Friedrich
ROBERT FRIEDRICH

Gordon C. Kampen
GORDON C. KAMPEN

PLENTYWOOD GOLF CLUB

Cory Benson
CORY BENSON

APPENDIX C

WETLAND EVALUATION

FOR

MONTANA DEPARTMENT OF TRANSPORTATION

PLENTYWOOD - NORTH
F 34-1(2)0

Prepared For

Thomas, Dear, & Hoskins Inc.
1200 Twenty-Fifth Street South
Great Falls, Montana 59405

June 1, 1992

Prepared By

Les R. Reichelt, Biologist
312 Juniper Avenue
Glendive, Montana 59330
406-335-6414

DESCRIPTION OF THE PROJECT

The proposed project is located on Montana Highway 16 in Sheridan County. The project will consist of upgrading the existing roadway and will begin at the intersection with Montana Highway 5 in Plentywood and extend northerly for approximately 15.8 miles to the Canadian border. The new alignment will follow the existing roadway as much as possible. The existing horizontal alignment should be utilized from the beginning of the project for about 3.6 miles north. At this point two alignments are reviewed for about 6.3 miles. At approximately milepost 9.9, the proposed project will return to the existing roadway. From this station, approximately 9.9 miles north of the beginning of the project, the Montana Department of Transportation (MDT) recommends that the new alignment be offset about 50 feet west of the existing roadway. The existing alignment would once again be utilized for the last 0.8 miles of the project. The curves at milepost 12.0 and 14.3 are also scheduled for elimination or modification.

Alternate 1

The proposed alignment would depart from the existing alignment at milepost 3.6 and would be located approximately 1/4 mile east of the current alignment. It would return to the current roadway near milepost 9.9. The reason for studying this alternate is because it would eliminate a number of curves in the existing alignment. This road may become a Highway of National Significance and the MDT believes, as such, the road should meet the highest standards of design.

Alternate 2

The alignment for this alternate would closely follow the current alignment from milepost 3.6 to 9.9. It would depart from the current alignment at milepost 3.6 and would be offset about 50 feet to the west of the current alignment to a point about .2 miles south of Raymond where it would tie in with the current alignment. This shift would reduce the degree of curvature at milepost 6.6 and also minimize impacts to the park located on the east side of the current alignment.

The MDT recommends that the subgrade be constructed to accommodate a future standard 36-foot top width. This project will result in a 28-foot finished top width. The possibility of simply widening and overlaying the first three miles of the project may be investigated. If this is feasible, there would be substantial cost savings compared to full reconstruction.

DESCRIPTION OF THE PROJECT AREA

This proposed project is located in extreme northeast Montana. The area is primarily used for dryland farming with some irrigation. There are a few areas that are used for livestock grazing.

METHODS

Guidelines provided by the Montana Department of Transportation were followed as closely as possible. Black and white aerial photographs at a scale of approximately 1:6000 were provided by the Montana Department of Transportation for this project. A mylar overlay was then constructed until the entire project was covered. A field survey was conducted on November 17, 1991 and again on May 23, 1992. The wetland sites were identified and later placed on the mylar overlay. A wetland site evaluation form was then filled out for each site. These are included with the report. A color photograph was also taken of the wetland sites.

DESCRIPTION OF WETLANDS

There were four wetland sites found in the area of this project. Two were found along near the northern end of the project, one was located below Raymond Reservoir along alternate 2, and one was found along alternate 1 just above Raymond Reservoir. Each of these wetlands are delineated on the aerial photographs.

SITE 1

This site is located near milepost 6.5 along alternate two just below Raymond Reservoir and is located west of the current alignment. The first photograph is taken from the highway towards the east with the town of Raymond in the background. The cattail (*Typha latifolia*) vegetation can be seen in the foreground.



Figure 1 - Northeast view from highway

This second photograph was taken from the same spot along the highway as the above photograph, near milepost 6.5, but is directed towards the west. This site is more representative of the area that will be affected by the highway. The new alignment will be located approximately 50 feet west of where this picture was taken. Again the cattails (*Typha latifolia*) can be seen with some open water. Wild rose (*Rosa woodsii*) bushes can also be seen in this picture. Although there is some open water, this wetland site is probably most valuable to song birds and small mammals. This site is directly below Raymond Reservoir which provides plenty of open water for waterfowl and other shore birds. Approximately 31,250 square feet of wetland habitat will be affected. This is assuming an area approximately 125 feet wide and 250 feet long will be disturbed by construction.



Figure 2 - West view from highway

This next photograph was taken from the same spot as the above photograph. This picture better illustrates the type of habitat that will be taken by alternate two. The new alignment will lie between the highway and the farm buildings that can be seen along the left edge of this photograph. The wetland site is that found along the drainage bottom that can also be seen along the left edge of the photograph.



Figure 3 - West view from highway

SITE 2

This site is located along alternate one just above Raymond Reservoir. This site is only half as big as the one above, approximately 15,625 square feet. There is some open water and the primary vegetative species is willow (*Salix* spp.) This site is probably used by waterfowl, song birds, and small mammals. It carries the water that drains into Raymond Reservoir.



Figure 4 - North view from above Raymond Reservoir

SITE 3

This site is located near milepost 12. This wetland is divided into two portions which can be seen in the aerial photographs. The most important segment of this wetland is that found southeast of the dike that divides the wetland. The quality of the wetland northwest of the dike is probably not as high as the area southeast of the dike. The southeast portion contains quite a bit of open water which provides important habitat to a number of birds associated with wetlands. During the field trip on May 23, 1992 a number of birds were observed using this wetland. A pair of Canadian geese (*Branta canadensis*) along with five goslings were observed. A picture of this group is included below. Willits (*Catoptrophorus semipalmatus*) and Wilson's phalaropes (*Steganopus tricolor*) were also observed. This wetland does not contain a large amount of vegetation that provides cover but the open water seems to be what draws the wildlife to this site. The area northwest of the dike does not contain any open water and probably functions in settling sediments from water that may occasionally collect at this site. There will be approximately 78,125 square feet of high quality wetland disturbed and 93,750 square feet of lesser quality wetland disturbed.

This photograph was taken from a point north of the wetland looking back to the south. The wetland can be seen in the background. This picture was taken to illustrate how the highway was originally designed to miss the wetland. The highway lines up perfectly except where it makes the curve around the wetland.



Figure 5 - South view north of Site 3

This figure is a combination of three individual photographs that give a panoramic view of the wetland site. These pictures were taken in November, 1991. Only the southeast portion of the wetland can be seen.



Figure 6 - West view of Site 3

This photograph was also taken in November, 1991. The dike that divides the wetland can be seen on the left side of the picture. The lower quality wetland can be seen to the right of the dike.



Figure 7 - West view of Site 3

The following photographs were taken in May, 1992. In the first picture, the family of Canadian geese can be seen. The open water can be seen as well as the lack of cover vegetation.



Figure 8 - East view of Site 3

This photograph is also of Site 3. This one was taken toward the north. Again the open water can be seen.



Figure 9 - North view of Site 3

SITE 4

This site is located near milepost 15. As can be seen in the following photograph, this wetland does not contain any open water and is probably of little value to most wildlife. There is probably some habitat for song birds and small mammals. The function of this site will likely be to provide a site for sediments to settle from water that has run off the cultivated fields. The highway is following the original alignment at this point in the project so the effect on this site should be minimal. Since the final design is not complete, the exact amount of effect is not known. Considering a 50 foot wide corridor and 500 feet in length, the amount of area disturbed would be 25,000 square feet.



Figure 10 - North view of Site 4

MITIGATION MEASURES

The exact amount of wetlands that is going to be affected by this project will not be known until final design is complete. However, it is safe to say there will be some effect on some high quality wetlands. There is little difference between alternate one and alternate two as far as wetlands are concerned. Alternate one will affect about .35 acres between mileposts 3.6 and 9.9. Along the same interval, alternate two will affect about .71 acres. The wetlands affected by either alternate are relatively high quality wetlands. At site three, a total of 3.94 acres of wetland will be affected. Of this, 1.79 acres is of high quality and the remaining 2.15 acres is of low quality. At site four, .57 acres of poor quality wetland will be affected. For the entire project, 5.22 acres of wetland will be affected by alternate two or 4.86 acres of wetland will be affected by alternate one.

The most promising area for mitigation appears to be near site three. In the aerial photos a wet area can be seen just to the southwest of site three. There appears to be ample water for a wetland. Further study at this site could be done to determine if the existing wetland conditions could be improved. After construction most of site three will be remaining. Enlargement of the site could be investigated as well as improving the area that lies on the northwest side of the dike. There does not appear to be any other areas near the existing wetland sites that would be as suitable for mitigation.

These are only recommendations and the final mitigation plan must be approved by the Montana Department of Transportation. A copy of the letter from the Montana Department of Fish, Wildlife, and Parks is enclosed. In it are their concerns regarding the placement of power lines over any wetland site. This problem should be addressed during mitigation design.

TABLE OF FUNCTIONAL VALUES

	<u>SITE 1</u>	<u>SITE 2</u>	<u>SITE 3</u>	<u>SITE 4</u>
Habitat Interspersion	1	1	1	1
Cover:Water Ratio	1.5	2	2	.5
Inundation Frequency	2	2	3	1
Sediment Control	1	1	2	2
Relative Occurrence*	2	2	2	2
Nutrient Retention	3	2.5	2	2
Flood Control	1	1	2	1
Food Chain Production	3	3	2	3
Wildlife Habitat Value				
Waterfowl	1	1	2	0
Upland Game Bird	1	1	1	1
Song Birds	1	1	1	1
Raptors	1	1	1	1
Furbearers	1	1	1	0
Small Mammals	1	1	1	1
Ungulates	1	1	0	0
Large Predators	0	0	0	0
T & E Species	0	0	0	0
Fisheries Habitat Value				
Mt. spp. of concern	0	0	0	0
Trout	0	0	0	0
Other Salmonids	0	0	0	0
Non-salmonid Game Fish	0	0	0	0
Non-game Fish	0	0	0	0
Recreation	1	1	2	1

*1-abundant 2-common 3-rare

SUMMARY OF AFFECTED WETLANDS BY TYPE AND AFFECTED AREA

FOR EACH SITE

<u>SITE NO.</u>	<u>HYDROLOGIC & VEG. TYPE</u>	<u>*ACREAGE</u>
1	II-A	.72
2	II-B	.36
3	I-D	3.94
4	II-A	.57

This is an estimated acreage of the total site. The amount affected will not be known until the construction plans are final.

HYDROLOGIC TYPE I ARE PERMANENT SHALLOW WATER
HYDROLOGIC TYPE II ARE SEASONAL OR PERMANENT HIGH WATER TABLE

VEGETATION TYPE A IS HERBACEOUS
VEGETATION TYPE B IS SHRUBS
VEGETATION TYPE D IS ROOTED EMERGENT

DEC 4 1991

Fish and Wildlife Enhancement
301 South Park
P.O. Drawer 10023
Helena, Montana 59626
Federal Building, U.S. Courthouse

FWE-61130-Billings
M.17 FHWA (Plentywood-North)

December 2, 1991

Mr. David S. Johnson, P.E.
Preconstruction Engineer
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

Dear Mr. Johnson:

This responds to your November 27, 1991 letter concerning Montana Department of Highways Project F34-1(2)0 (CN# 1822), Plentywood-North, and requesting identification of the threatened and endangered species that should be considered in connection with this project. Your letter invited other comments we may have.

The Federally-listed endangered and threatened species which occur or may occur within the project area are the black-footed ferret (Mustela nigripes), bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), piping plover (Charadrius melodus), least tern (Sterna antillarum), and the whooping crane (Grus americana). Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the Federal Highway Administration, as the responsible Federal agency, must determine if the proposed actions may affect these endangered species. If you or the Federal Highway Administration determine that any of these species may be affected, it will be necessary to initiate formal consultation with this office. The following information and recommendations may aid you in that determination.

Prairie dog (Cynomys sp.) towns are considered potential habitat for black-footed ferrets. If prairie dog towns are found to occur within the project rights-of-way, surveys for black-footed ferrets may need to be conducted and survey reports submitted to this office for review and concurrence within one year prior to disturbance to the towns. Please contact us for guidelines for conducting ferret surveys if you determine that prairie dog towns or ferrets may be affected by the proposed project.

Both peregrine falcons and bald eagles may occur in the area as spring and/or fall migrants, and bald eagles may occur near by as winter residents. We are not aware of peregrine falcon or bald eagle nest territories in or near the project area. While we do not foresee any substantive issues with the proposed project with regard to the bald eagle and peregrine falcon, any power lines in the vicinity, if not properly constructed, could pose electrocution hazards for these species. To conserve these species and other large raptors protected by Federal law, we urge that any power lines that may need to be modified or reconstructed as a result of the project be raptor-proofed following the criteria and techniques outlined in the Raptor Research Report No. 4, "Suggested Practices for

Raptor Protection on Power Lines - The State of the Art in 1981". A copy may be obtained from:

Jim Fitzpatrick, Treasurer
Raptor Research Foundation
Carpenter St. Croix Nature Center
12805 St. Croix Trail
Hastings, Minnesota 55033.


The June 24, 1991 Preliminary Field Review Report for this project indicates that some wetlands will be impacted. Crossing these wetlands with power lines should be avoided whenever this is at all possible. Where the potential for line strikes by migratory birds appears high, the lines should be rerouted, and if that is not possible, consideration should be given to burying the lines or "marking" any static wires (enlarged lines, marker balls or other means) at the most critical locations.

Also in connection with the wetland impacts, we assume a wetland inventory and impact assessment has or will be completed in accordance with the 1989, "Interagency Memorandum of Understanding: Management and Mitigation of Highway Construction Impacts to Wetlands in the State of Montana". We urge completion of any needed wetland mitigation in full accordance with that Memorandum of Understanding. We also note, in connection with potential wetland encroachments, that the project is in a part of the state where a number of piping plovers are known to nest on barren flats bordering saline lakes in the general area. From the limited information available, it appears the wetlands to be impacted by the project lack shorelines with such characteristics. However, if such barren shoreline areas occur, the possible impacts on nesting plovers needs to be addressed.

We lack the necessary information in this office to determine whether or not the proposed project would cross lands owned or managed by the Service. In this regard, we note that if such lands are involved it would be necessary to obtain a right-of-way from this agency. The appropriate local contact, in such an event, is Medicine Lake National Wildlife Refuge, HC51, Box 2, Medicine Lake, MT 59247.

We appreciate your efforts to consider and conserve fish and wildlife resources, including threatened and endangered species. If you have questions regarding this letter, please contact Mr. Gary Wood of our Billings Suboffice (406) 657-6750.

Sincerely,


Dale Harms
State Supervisor
FOR Montana State Office

JGW/jf

cc: Edrie Vinson, Montana Department of Highways (Helena, MT)
Jack Fisher, P.E., Thomas, Dean & Hoskins Inc. (Great Falls, MT)
Manager, Medicine Lake NWR
Suboffice Coordinator, USFWS, Fish & Wildlife Enhancement (Billings, MT)

"Take Pride in America"

Montana Department
of
Fish, Wildlife & Parks



Rural Route 1 4210
Glasgow, MT 59230
December 20, 1991

JAC

DEC 21 1991

Mr. Dean Haskins
JRF

Thomas, Dean & Haskins, Inc.
Engineering Consultants
1200 25th Street South
Great Falls, MT 59605

RE: PLENTYWOOD-NORTH F34-1(2)0 CN# 1822

10/15

Dear Sirs:

We have reviewed the plans for Plentywood-North and have the following comments:

Fisheries; Raymond Dam near MP7 has a popular fishery with Northern pike/yellow perch in the reservoir. Neither alternative 1 or 2 appear to affect the reservoir, however alternative 1 with a wider right of way may affect the current access to the reservoir. At present, there are three access points to the reservoir which would be nice to maintain.

No other fisheries impacts appear on this proposed project.

Wildlife habitat; There appears to be three wetland areas that may be affected. A 4-acre wetland at MP12 alternate 1; A 3-4 acre wetland near MP 14 alternate 1; A smaller wetland area near MP7 alternate 2. These wetlands provide pair and brood habitat for waterfowl and whitetail deer use the marsh vegetation (cattails and bullrushes) for hiding and thermal cover.

Previous alteration of the first wetland has already destroyed some wildlife habitat. A dike has been constructed across the wetland in an attempt to put some of the wetland area into crop production.

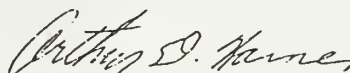
Both of the other sites are intermittent creeks and their adjacent flood plains. These areas provide habitat for waterfowl, deer and upland game birds.

Since mitigation for wetland losses is necessary, the following suggestions should be considered when constructing a new wetland:



- 1) The majority of the wetland should have a maximum water depth of 6 feet or less. Depths of 2-3 feet are ideal for the growth of marsh vegetation. "Dugout" type wetlands should be strictly avoided.
- 2) The shoreline should be long and irregular and there should be a very gentle gradient extending into the water. Steep banks should be avoided.
- 3) The wetland should be located next to suitable nesting cover and away from cropland.
- 4) The wetland should be located within 1 mile to other wetlands.

Sincerely,



Arthur D. Warner
Regional Supervisor

ADW/je

cc: Al Wipperman
Harold Wentland



THIS PROJECT
F 34-1(2)0
PLENTYWOOD-N

SASK.
MONT.

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S. DAK.

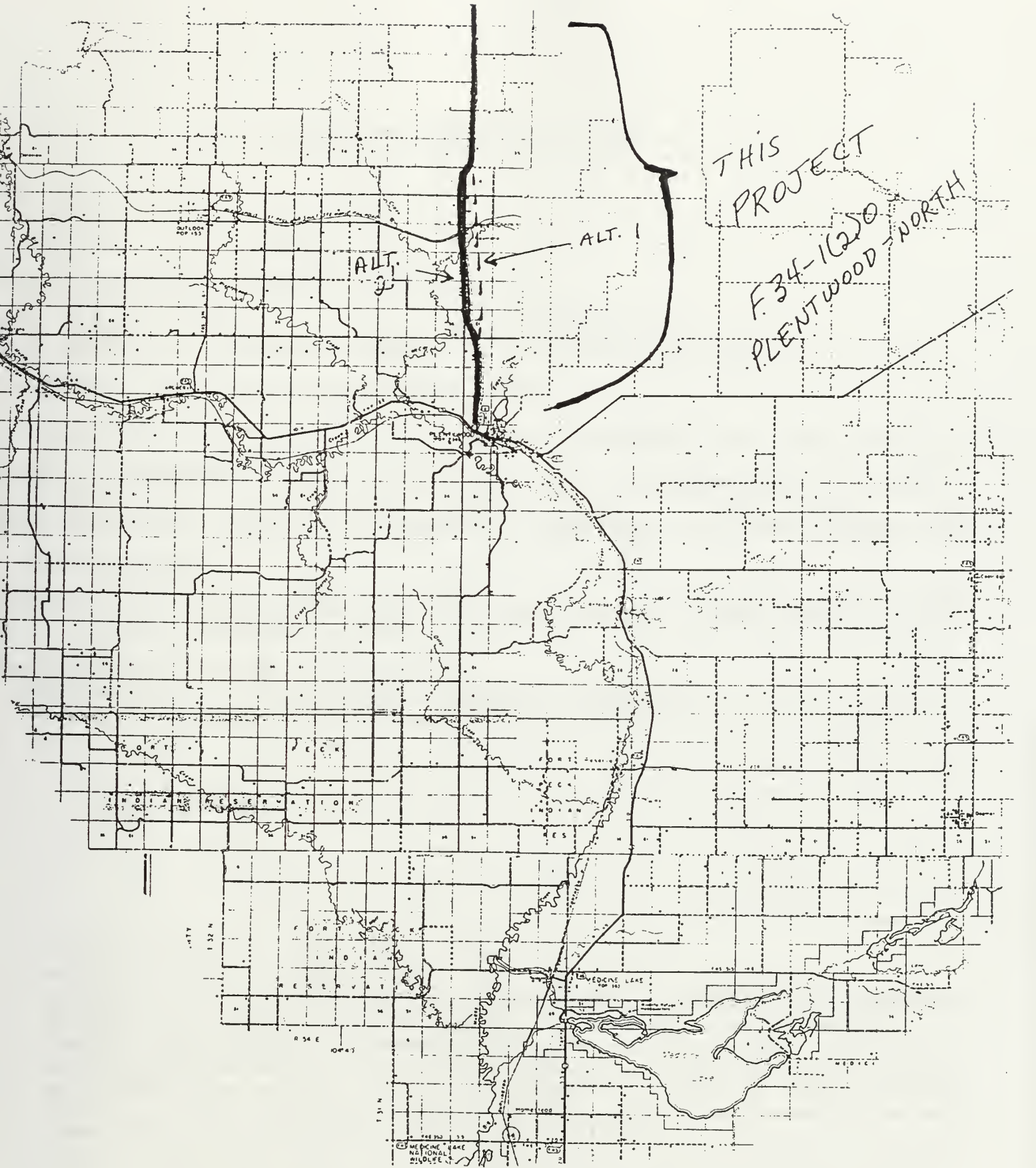
To Wallard City, 114 miles

MOUNTAIN STANDARD TIME — CENTRAL STANDARD TIME

To Bismarck, 161 miles

To Bismarck, 33 miles

THIS PROJECT
F34-16250
PLENTWOOD-NORTH



MONTANA DEPARTMENT OF HIGHWAYS
WETLAND SITE EVALUATION

Date 11-17-91

Project No. E34-1(2)0

Project Name Plentywood - North

County Sheridan Drainage Missouri R.

Range R54E Township T36N Section 13 (24)

Site Location Station (on plan sheet) Site 1

Comments (route, milepost, etc.) near milepost 6.5 on west side of current traveled way - new alignment will be entirely west of present highway - located along alt. 2

Classification

Hydrologic Type(s) II - Seasonal or permanent high water tables
Area 31,250 sq. ft.

Vegetative Type(s) (1) A - Herbaceous
Dominant Species (a) Cattails - Typha latifolia
(b) _____
(c) _____
(2) _____
(a) _____
(b) _____
(c) _____
(3) _____
(a) _____
(b) _____
(c) _____

Adjacent Supporting Habitats (Descriptive Summary)

Wetlands (type, vegetation, area, location, condition, wildlife values) This particular wetland site is located downstream of Raymond Reservoir. The ~~entire~~ area located below the dam is quite wetland wet. There are quite a few areas with cattails & little open water. This site has a little open water but its value probably lies with small mammals & song birds. The Reservoir provides habitat for waterfowl & shore birds.

Uplands (vegetation type, area, location, condition, land use, erosion potential, wildlife values) The adjacent areas are primarily cultivated farmland, there are also some areas of pasture. The area is relatively flat with some hills. There probably is some potential for erosion but not much. Wildlife use of the area is minimal since there is little cover available.

Relative Commonness of Wetland Type in Area Common
(abundant, common, rare)

Degree of Habitat Interspersion Low = 1 Moderate = 2 High = 3

Vegetative Cover Characteristics of Flooded Wetlands.
(not applicable to non-flooded wetlands) Rating

- a. Cover occupies more than 95% of wetland 0.5
- b. Cover occupies 76-95% of wetland in peripheral band 1.5
- c. Cover occupies 76-95% of wetland with scattered open water areas 2.5
- d. Cover occupies 26-75% of wetland occurring in dense patches or diffuse stands 3.0
- e. Cover occupies 26-75% of wetland in peripheral band 2.0
- f. Cover occupies 5-25% of wetland occurring in a peripheral band or diffuse open stands 1.0
- g. Cover occupies less than 5% of the wetland 0.5

Inundation frequency Rating

- a. Temporary surface water or saturated soil 1
- b. Seasonally or intermittently flooded 2
- c. Semi-permanent or permanently flooded 3

Sediment Control/Load Rating Criteria Rating

- a. Wetland does not receive detectable amounts of sediment- the watercourse is relatively sediment-free and accumulations are not evident 1
- b. Wetland receives some sediment load but not enough to impact the plants or aquatic organisms using the site. The watercourse has sediment accumulations but the water is not normally turbid 2
- c. Wetland receives heavy sediment loads that has impacted the plant/animal growth/use of the site. The watercourse has large accumulations of sediment and the water is usually turbid 3

Water Flow Rating Criteria (check one)

- a. Most of the water flows through the wetland in distinct channels or watercourses or has little flow of surface water during the year

- b. Channels of watercourses present, but a significant portion of water is sheet flow through the wetland _____
- c. Water flows across wetland uniformly and is not contained in channels or watercourses _____

Nutrient Retention Capabilities
(circle one ranking)

- a. Non-contiguous wetland with little accumulation of organic matter 1
- b. Non-contiguous wetland with organic material accumulation 2
- c. Contiguous wetland with little accumulation of organic matter 2.5
- d. Contiguous wetland with organic material accumulation (3)

Relative Flood Storage Potential

- a. Section 8, line a; Section 6, line a (1)
- b. Section 8, line b; Section 6, line b 2
- c. Section 8, line c; Section 6, line c 3

Relative Food Chain Support Potential (Based on percent vegetative cover and estimated relative standing crop).

- a. Low (vegetative cover less than 5%; non-contiguous; no accumulation of organic matter) 1
- b. Moderate (vegetative cover 6-25%; contiguous or non-contiguous to other supporting habitats; some accumulation of organic material) 2
- c. High (vegetative cover 26-100%; contiguous to other supporting habitats, some accumulation of organic material) (3)

Wildlife Habitat Values (Overall)
 (Based on cover, diversity, supporting habitats, and productivity)

Rating (0-3)

Evaluation Group or Species

a. Waterfowl	<u>1</u>
b. Upland Game Birds	<u>1</u>
c. Songbirds	<u>1</u>
d. Raptors and Others	<u>1</u>
e. Furbearers	<u>1</u>
f. Non-furbearing small mammals	<u>1</u>
g. Large Ungulates (elk, moose, deer)	<u>1</u>
h. Large Carnivores (bear, cat)	<u>0</u>
i. Threatened or Endangered Species	<u>0</u>

Evaluate utilization by waterfowl/wildlife of wetland site for nesting, rearing young, feeding or protective cover based upon the following criteria (high, medium, low).

Use by wildlife group is significant in that loss or reduction by the wildlife use would have an adverse effect on the population of the species or wildlife in the general area (township) 3

Use by wildlife group is evident and loss or reduction of the wildlife use may have an adverse effect on the local wildlife population (surrounding section<s>) 2

Use by wildlife group is low or incidental in that loss or reduction of the wildlife use would have a negligible effect on the local wildlife population 1

Use by wildlife group is nonexistent at any time during any year. NOTE: Use .3 to signify occasional use 0

Estimate utilization by fish for spawning, nursery, feeding, or cover.

a. Montana fishes of special concern	<u>0</u>
b. Trout	<u>0</u>
c. Non-Salmonids	<u>0</u>
d. Non-Salmonid Game Fish (pike, bass, walleyes)	<u>0</u>
e. None-Game or Rough Fish	<u>0</u>

Use by fish is significant in that loss or reduction of the fish use would have an adverse effect on the population of the fish in adjacent waters 3

Use by fish is evident or probably and loss or reduction of the fish use may have an adverse effect on the population of fish in the immediate vicinity but the magnitude of the reduction would be insignificant in relation to the total population of fish in adjacent waters 2

Use by fish is low or incidental in that loss or reduction of the fish use would have a negligible effect on the population of fish in the immediate vicinity 1

Use by fish never present at any time in the year 0

Recreation Use Potential ①
2
3

Summary of Functional Values and Overall Site Ranking

Sediment Control Rating 1/3
Nutrient Retention Rating 3/3
Relative Flood Storage Rating 1/3
Relative Food Chain Support 3/3

Wildlife Habitat Values

Highest (Evaluation Group A-G) 1/3
Lowest (Evaluation Group H+I) 0/3

Fisheries Habitat Values

Highest (Evaluation Group) 0/3
Lowest (Evaluation Group A//D) 0/3

MONTANA DEPARTMENT OF HIGHWAYS
WETLAND SITE EVALUATION

Date 5-23-92

Project No. F34-1(2)0

Project Name Plentywood - North

County Sheridan Drainage Missouri L.
Range R55E Township T36N Section 18

Site Location Station (on plan sheet) ^{Site 2} Along Alt. 1, above Raymond Res.

Comments (route, milepost, etc.) This site is located above Raymond Reservoir, along alternate 1,

1. Classification

Hydrologic Type(s) II B - Seasonal or Permanent High Water Table
Area 15,625 sq ft

Vegetative Type(s) (1) B - Shrubs
Dominant Species (a) Willow - Salix
(b) _____
(c) _____
(2) _____
(a) _____
(b) _____
(c) _____
(3) _____
(a) _____
(b) _____
(c) _____

Adjacent Supporting Habitats (Descriptive Summary)

Wetlands (type, vegetation, area, location, condition, wildlife values) This site is located at the bottom of a coulee, part of a drainage system that leads to Raymond Reservoir. There is quite a bit of habitat similar to this site located along the drainage. These sites are used extensively by waterfowl and song birds.

Uplands (vegetation type, area, location, condition, land use, erosion potential, wildlife values)

This site is located within a pasture and is within 1/2 mile of cultivated crop land. There is little erosion potential in the immediate area, in low because of the grassland habitat. There may be some erosion from the cultivated land.

Relative Commonness of Wetland Type in Area Common
(abundant, common, rare)

Degree of Habitat Interspersion Low = 1 Moderate = 2 High = 3

Vegetative Cover Characteristics of Flooded Wetlands.
(not applicable to non-flooded wetlands) Rating

- a. Cover occupies more than 95% of wetland 0.5
- b. Cover occupies 76-95% of wetland in peripheral band 1.5
- c. Cover occupies 76-95% of wetland with scattered open water areas 2.5
- d. Cover occupies 26-75% of wetland occurring in dense patches or diffuse stands 3.0
- e. Cover occupies 26-75% of wetland in peripheral band 2.0
- f. Cover occupies 5-25% of wetland occurring in a peripheral band or diffuse open stands 1.0
- g. Cover occupies less than 5% of the wetland 0.5

Inundation frequency Rating

- a. Temporary surface water or saturated soil 1
- b. Seasonally or intermittently flooded 2
- c. Semi-permanent or permanently flooded 3

Sediment Control/Load Rating Criteria Rating

- a. Wetland does not receive detectable amounts of sediment- the watercourse is relatively sediment-free and accumulations are not evident 1
- b. Wetland receives some sediment load but not enough to impact the plants or aquatic organisms using the site. The watercourse has sediment accumulations but the water is not normally turbid 2
- c. Wetland receives heavy sediment loads that has impacted the plant/animal growth/use of the site. The watercourse has large accumulations of sediment and the water is usually turbid 3

Water Flow Rating Criteria (check one)

- a. Most of the water flows through the wetland in distinct channels or watercourses or has little flow of surface water during the year ✓

- b. Channels of watercourses present, but a significant portion of water is sheet flow through the wetland _____
- c. Water flows across wetland uniformly and is not contained in channels or watercourses _____

Nutrient Retention Capabilities
(circle one ranking)

- a. Non-contiguous wetland with little accumulation of organic matter 1
- b. Non-contiguous wetland with organic material accumulation 2
- c. Contiguous wetland with little accumulation or organic matter 2.5
- d. Contiguous wetland with organic material accumulation 3

Relative Flood Storage Potential

- a. Section 8, line a; Section 6, line a 1
- b. Section 8, line b; Section 6, line b 2
- c. Section 8, line c; Section 6, line c 3

Relative Food Chain Support Potential (Based on percent vegetative cover and estimated relative standing crop).

- a. Low (vegetative cover less than 5%; non-contiguous; no accumulation of organic matter) 1
- b. Moderate (vegetative cover 6-25%; contiguous or non-contiguous to other supporting habitats; some accumulation of organic material) 2
- c. High (vegetative cover 26-100%; contiguous to other supporting habitats, some accumulation of organic material) 3

12. Wildlife Habitat Values (Overall) Rating (0-3)
 (Based on cover, diversity, supporting habitats, and productivity)

Evaluation Group or Species

a. Waterfowl	1
b. Upland Game Birds	1
c. Songbirds	1
d. Raptors and Others	1
e. Furbearers	1
f. Non-furbearing small mammals	1
g. Large Ungulates (elk, moose, deer)	1
h. Large Carnivores (bear, cat)	0
i. Threatened or Endangered Species	0

Evaluate utilization by waterfowl/wildlife of wetland site for nesting, rearing young, feeding or protective cover based upon the following criteria (high, medium, low).

Use by wildlife group is significant in that loss or reduction by the wildlife use would have an adverse effect on the population of the species or wildlife in the general area (township) 3

Use by wildlife group is evident and loss or reduction of the wildlife use may have an adverse effect on the local wildlife population (surrounding section(s)) 2

Use by wildlife group is low or incidental in that loss or reduction of the wildlife use would have a negligible effect on the local wildlife population 1

Use by wildlife group is nonexistent at any time during any year. NOTE: Use .3 to signify occasional use 0

13. Estimate utilization by fish for spawning, nursery, feeding, or cover.

a. Montana fishes of special concern	0
b. Trout	0
c. Non-Salmonids	0
d. Non-Salmonid Game Fish (pike, bass, walleyes)	0
e. None-Game or Rough Fish	0

Use by fish is significant in that loss or reduction of the fish use would have an adverse effect on the population of the fish in adjacent waters 3

Use by fish is evident or probably and loss or reduction of the fish use may have an adverse effect on the population of fish in the immediate vicinity but the magnitude of the reduction would be insignificant in relation to the total population of fish in adjacent waters 2

Use by fish is low or incidental in that loss or reduction of the fish use would have a negligible effect on the population of fish in the immediate vicinity 1

Use by fish never present at any time in the year 0

Recreation Use Potential ①
2
3

Summary of Functional Values and Overall Site Ranking

Sediment Control Rating 2/3
Nutrient Retention Rating 2.5/3
Relative Flood Storage Rating 1/3
Relative Food Chain Support 3/3

Wildlife Habitat Values

Highest (Evaluation Group A-G) 1/3
Lowest (Evaluation Group HEI) 0/3

Fisheries Habitat Values

Highest (Evaluation Group) 0/3
Lowest (Evaluation Group ALL) 0/3

MONTANA DEPARTMENT OF HIGHWAYS
WETLAND SITE EVALUATION

Date 5-23-92

Project No. F34-1(2)0

Project Name Plentywood - North

County Sheridan Drainage Missouri R.

Range R54E Township T37N Section 22

Site Location Station (on plan sheet) Site 3

Comments (route, milepost, etc.) This site is near milepost 12. The current highway was routed to miss this wetland. The new alignment will go right through the middle of it.

Classification

Hydrologic Type(s) I - Permanent Shallow water

Area 171,875 sq. ft.

Vegetative Type(s) (1) D - rooted emergent

Dominant Species (a) Potamogeton ssp.

(b) _____

(c) _____

(2) _____

(a) _____

(b) _____

(c) _____

(3) _____

(a) _____

(b) _____

(c) _____

Adjacent Supporting Habitats (Descriptive Summary)

Wetlands (type, vegetation, area, location, condition, wildlife values) There does appear to be similar sites in the area (within 1 mile) - this is an important site & is receiving extensive use by numerous bird species.

Uplands (vegetation type, area, location, condition, land use, erosion potential, wildlife values) The uplands here are cultivated fields - there are grasslands (pastures) within 1/2 mile - there is some erosion potential since the adjacent area is cultivated farmland - wildlife values of adjacent area is moderate with waterfowl nesting, etc.

Relative Commonness of Wetland Type in Area Common
(abundant, common, rare)

Degree of Habitat Interspersion Low = 1 Moderate = 2 High = 3

Vegetative Cover Characteristics of Flooded Wetlands.
(not applicable to non-flooded wetlands) Rating

- a. Cover occupies more than 95% of wetland 0.5
- b. Cover occupies 76-95% of wetland in peripheral band 1.5
- c. Cover occupies 76-95% of wetland with scattered open water areas 2.5
- d. Cover occupies 26-75% of wetland occurring in dense patches or diffuse stands 3.0
- e. Cover occupies 26-75% of wetland in peripheral band 2.0
- f. Cover occupies 5-25% of wetland occurring in a peripheral band or diffuse open stands 1.0
- g. Cover occupies less than 5% of the wetland 0.5

Inundation frequency Rating

- a. Temporary surface water or saturated soil 1
- b. Seasonally or intermittently flooded 2
- c. Semi-permanent or permanently flooded 3

Sediment Control/Load Rating Criteria Rating

- a. Wetland does not receive detectable amounts of sediment- the watercourse is relatively sediment-free and accumulations are not evident 1
- b. Wetland receives some sediment load but not enough to impact the plants or aquatic organisms using the site. The watercourse has sediment accumulations but the water is not normally turbid 2
- c. Wetland receives heavy sediment loads that has impacted the plant/animal growth/use of the site. The watercourse has large accumulations of sediment and the water is usually turbid 3

Water Flow Rating Criteria (check one)

- a. Most of the water flows through the wetland in distinct channels or watercourses or has little flow of surface water during the year _____

- b. Channels of watercourses present, but a significant portion of water is sheet flow through the wetland
- c. Water flows across wetland uniformly and is not contained in channels or watercourses

 ✓

Nutrient Retention Capabilities
 (circle one ranking)

- a. Non-contiguous wetland with little accumulation of organic matter 1
- b. Non-contiguous wetland with organic material accumulation (2)
- c. Contiguous wetland with little accumulation or organic matter 2.5
- d. Contiguous wetland with organic material accumulation 3

0. Relative Flood Storage Potential

- a. Section 8, line a; Section 6, line a 1
- b. Section 8, line b; Section 6, line b (2)
- c. Section 8, line c; Section 6, line c 3

1. Relative Food Chain Support Potential (Based on percent vegetative cover and estimated relative standing crop).

- a. Low (vegetative cover less than 5%; non-contiguous; no accumulation of organic matter) 1
- b. Moderate (vegetative cover 6-25%; contiguous or non-contiguous to other supporting habitats; some accumulation of organic material) (2)
- c. High (vegetative cover 26-100%; contiguous to other supporting habitats, some accumulation of organic material) 3

2. Wildlife Habitat Values (Overall) Rating (0-3)
 (Based on cover, diversity, supporting habitats, and productivity)

Evaluation Group or Species

a. Waterfowl	2
b. Upland Game Birds	1
c. Songbirds	1
d. Raptors and Others	1
e. Furbearers	1
f. Non-furbearing small mammals	1
g. Large Ungulates (elk, moose, deer)	0
h. Large Carnivores (bear, cat)	0
i. Threatened or Endangered Species	0

Evaluate utilization by waterfowl/wildlife of wetland site for nesting, rearing young, feeding or protective cover based upon the following criteria (high, medium, low).

Use by wildlife group is significant in that loss or reduction by the wildlife use would have an adverse effect on the population of the species or wildlife in the general area (township) 3

Use by wildlife group is evident and loss or reduction of the wildlife use may have an adverse effect on the local wildlife population (surrounding section<s>) 2

Use by wildlife group is low or incidental in that loss or reduction of the wildlife use would have a negligible effect on the local wildlife population 1

Use by wildlife group is nonexistent at any time during any year. NOTE: Use .3 to signify occasional use 0

3. Estimate utilization by fish for spawning, nursery, feeding, or cover.


a. Montana fishes of special concern	0
b. Trout	0
c. Non-Salmonids	0
d. Non-Salmonid Game Fish (pike, bass, walleyes)	0
e. None-Game or Rough Fish	0

Use by fish is significant in that loss or reduction of the fish use would have an adverse effect on the population of the fish in adjacent waters 3

Use by fish is evident or probably and loss or reduction of the fish use may have an adverse effect on the population of fish in the immediate vicinity but the magnitude of the reduction would be insignificant in relation to the total population of fish in adjacent waters 2

Use by fish is low or incidental in that loss or reduction of the fish use would have a negligible effect on the population of fish in the immediate vicinity 1

Use by fish never present at any time in the year 0

4. Recreation Use Potential 
3

5. Summary of Functional Values and Overall Site Ranking

Sediment Control Rating 2/3
Nutrient Retention Rating 2/3
Relative Flood Storage Rating 2/3
Relative Food Chain Support 2/3

Wildlife Habitat Values
Highest (Evaluation Group A) 2/3
Lowest (Evaluation Group g-i) 0/3

Fisheries Habitat Values
Highest (Evaluation Group) 1/3
Lowest (Evaluation Group ALL) 0/3

MONTANA DEPARTMENT OF HIGHWAYS
WETLAND SITE EVALUATION

Date 11-17-91
Project No. F34-1(2) 0
Project Name Plentywood - North
County Sheridan Drainage Missouri R.
Range R54 E Township T37 N Section 3
Site Location: Station (on plan sheet) Site 4
Comments (route, milepost, etc.) near milepost 15 on both sides of highway

1. Classification

Hydrologic Type(s) II - Seasonal or Permanent High water table
Area 25,000 sq. ft.

Vegetative Type(s) (1) A - Herbaceous
Dominant Species (a) BUCKWHEAT FAMILY - *Polygonum* s.p.
(b) _____
(c) _____
(2) _____
(a) _____
(b) _____
(c) _____
(3) _____
(a) _____
(b) _____
(c) _____

Adjacent Supporting Habitats (Descriptive Summary)
Wetlands (type, vegetation, area, location, condition, wildlife values) There appears, on the aerial photos, to be similar sites very near to this site. These adjacent areas ~~are~~ also appear dry & probably provide little, little to most wildlife - song birds & small mammals are the species that utilize this type of site the most.

Uplands (vegetation type, area, location, condition, land use, erosion potential, wildlife values) Cultivated fields are located adjacent to this site however pastures (grasslands) are along the north side of the site. There is very little cover for wildlife so use of the up lands by wildlife is probably minimal.

Relative Commonness of Wetland Type in Area Common
(abundant, common, rare)

Degree of Habitat Interspersion Low = ① Moderate = 2 High = 3

Vegetative Cover Characteristics of Flooded Wetlands.
(not applicable to non-flooded wetlands)

	<u>Rating</u>
a. Cover occupies more than 95% of wetland	① 0.5
b. Cover occupies 76-95% of wetland in peripheral band	1.5
c. Cover occupies 76-95% of wetland with scattered open water areas	2.5
d. Cover occupies 26-75% of wetland occurring in dense patches or diffuse stands	3.0
e. Cover occupies 26-75% of wetland in peripheral band	2.0
f. Cover occupies 5-25% of wetland occurring in a peripheral band or diffuse open stands	1.0
g. Cover occupies less than 5% of the wetland	0.5

Inundation frequency Rating

a. Temporary surface water or saturated soil	① 1
b. Seasonally or intermittently flooded	2
c. Semi-permanent or permanently flooded	3

Sediment Control/Load Rating Criteria Rating

a. Wetland does not receive detectable amounts of sediment - the watercourse is relatively sediment-free and accumulations are not evident	① 1
b. Wetland receives some sediment load but not enough to impact the plants or aquatic organisms using the site. The watercourse has sediment accumulations but the water is not normally turbid	2
c. Wetland receives heavy sediment loads that has impacted the plant/animal growth/use of the site. The watercourse has large accumulations of sediment and the water is usually turbid	3

Water Flow Rating Criteria (check one)

a. Most of the water flows through the wetland in distinct channels or watercourses or has little flow of surface water during the year	_____
---	-------

- b. Channels of watercourses present, but a significant portion of water is sheet flow through the wetland
- c. Water flows across wetland uniformly and is not contained in channels or watercourses

✓

Nutrient Retention Capabilities
(circle one ranking)

- a. Non-contiguous wetland with little accumulation of organic matter ~~1~~
- b. Non-contiguous wetland with organic material accumulation 2
- c. Contiguous wetland with little accumulation or organic matter 2.5
- d. Contiguous wetland with organic material accumulation 3

Relative Flood Storage Potential

- a. Section 8, line a; Section 6, line a 1
- b. Section 8, line b; Section 6, line b 2
- c. Section 8, line c; Section 6, line c 3

Relative Food Chain Support Potential (Based on percent vegetative cover and estimated relative standing crop).

- a. Low (vegetative cover less than 5%; non-contiguous; no accumulation of organic matter) 1
- b. Moderate (vegetative cover 6-25%; contiguous or non-contiguous to other supporting habitats; some accumulation of organic material) 2
- c. High (vegetative cover 26-100%; contiguous to other supporting habitats, some accumulation of organic material) 3

2. Wildlife Habitat Values (Overall) Rating (0-3)
 (Based on cover, diversity, supporting habitats, and productivity)

Evaluation Group or Species

a. Waterfowl	0
b. Upland Game Birds	1
c. Songbirds	1
d. Raptors and Others	1
e. Furbearers	0
f. Non-furbearing small mammals	1
g. Large Ungulates (elk, moose, deer)	0
h. Large Carnivores (bear, cat)	0
i. Threatened or Endangered Species	0

Evaluate utilization by waterfowl/wildlife of wetland site for nesting, rearing young, feeding or protective cover based upon the following criteria (high, medium, low).

Use by wildlife group is significant in that loss or reduction by the wildlife use would have an adverse effect on the population of the species or wildlife in the general area (township) 3

Use by wildlife group is evident and loss or reduction of the wildlife use may have an adverse effect on the local wildlife population (surrounding section<s>) 2

Use by wildlife group is low or incidental in that loss or reduction of the wildlife use would have a negligible effect on the local wildlife population 1

Use by wildlife group is nonexistent at any time during any year. NOTE: Use .3 to signify occasional use 0

3. Estimate utilization by fish for spawning, nursery, feeding, or cover.

a. Montana fishes of special concern	0
b. Trout	0
c. Non-Salmonids	0
d. Non-Salmonid Game Fish (pike, bass, walleyes)	0
e. None-Game or Rough Fish	0

Use by fish is significant in that loss or reduction of the fish use would have an adverse effect on the population of the fish in adjacent waters 3

Use by fish is evident or probably and loss or reduction of the fish use may have an adverse effect on the population of fish in the immediate vicinity but the magnitude of the reduction would be insignificant in relation to the total population of fish in adjacent waters 2

Use by fish is low or incidental in that loss or reduction of the fish use would have a negligible effect on the population of fish in the immediate vicinity 1

Use by fish never present at any time in the year 0

4. Recreation Use Potential (1)
2
3

5. Summary of Functional Values and Overall Site Ranking

Sediment Control Rating 1/3
Nutrient Retention Rating 2/3
Relative Flood Storage Rating 1/3
Relative Food Chain Support 3/3

Wildlife Habitat Values

Highest (Evaluation Group B, C, D, F) 1/3
Lowest (Evaluation Group A, E, G-i) 0/3

Fisheries Habitat Values

Highest (Evaluation Group) 0/3
Lowest (Evaluation Group A, I) 0/3

RARE & SENSITIVE SPECIES REPORT

FOR

MONTANA DEPARTMENT OF TRANSPORTATION

PLENTYWOOD - NORTH

F 34-1(2)0

Prepared For

Thomas, Dean, & Hoskins Inc.
1200 Twenty-Fifth Street South
Great Falls, Montana 59405

June 9, 1992

Prepared By

Les R. Reichelt, Biologist
312 Juniper Avenue
Glendive, Montana 59330
406-365-6414

DESCRIPTION OF THE PROJECT

The proposed project is located on Montana Highway 16 in Sheridan County. The project will consist of upgrading the existing roadway and will begin at the intersection with Montana Highway 5 in Plentywood and extend northerly for approximately 15.8 miles to the Canadian border. The new alignment will follow the existing roadway as much as possible. The existing horizontal alignment should be utilized from the beginning of the project for about 3.6 miles north. At this point two alignments are reviewed for about 6.3 miles. At approximately milepost 9.9, the proposed project will return to the existing roadway. From this station, approximately 9.9 miles north of the beginning of the project, the Montana Department of Transportation (MDT) recommends that the new alignment be offset about 50 feet west of the existing roadway. The existing alignment would once again be utilized for the last 0.8 miles of the project. The curves at milepost 12.0 and 14.3 are also scheduled for elimination or modification.

Alternate 1

The proposed alignment would depart from the existing alignment at milepost 3.6 and would be located approximately 1/4 mile east of the current alignment. It would return to the current roadway near milepost 9.9. The reason for studying this alternate is because it would eliminate a number of curves in the existing alignment. This road may become a Highway of National Significance and the MDT believes, as such, the road should meet the highest standards of design.

Alternate 2

The alignment for this alternate would closely follow the current alignment from milepost 3.6 to 9.9. It would depart from the current alignment at milepost 3.6 and would be offset about 50 feet to the west of the current alignment to a point about .2 miles south of Raymond where it would tie in with the current alignment. This shift would reduce the degree of curvature at milepost 6.6 and also minimize impacts to the park located on the east side of the current alignment.

The MDT recommends that the subgrade be constructed to accommodate a future standard 36-foot top width. This project will result in a 28-foot finished top width. The possibility of simply widening and overlaying the first three miles of the project may be investigated. If this is feasible, there would be substantial cost savings compared to full reconstruction.

DESCRIPTION OF THE PROJECT AREA

This proposed project is located in extreme northeast Montana. The area is primarily used for dryland farming with some irrigation. There are a few areas that are used for livestock grazing.

METHODS

A letter was sent to the Montana Natural Heritage Program in Helena, Montana. A copy of their response is included with this report. They reported no records in their database for this particular project area. Also included in their correspondence was a list of plant and animal species of special concern in Montana. A review of these lists was made and no species was obvious in this area. A field survey was also made on May 23, 1992, to determine if any rare or sensitive species were present on this project.

CONCLUSION

During the field review of the project, no rare or sensitive species, plant or animal, were observed. Due to the nature of this project, that is the minimal amount of habitat that should be disturbed by the widening of the existing highway, there should be little, if any, impact on any plant or animal species considered rare or sensitive. Most of the land in the vicinity has been disturbed by farming and in these areas any plant species that are rare or sensitive would probably not be present.



MONTANA NATURAL HERITAGE PROGRAM

1515 East Sixth Avenue
Helena, Montana 59620
(406) 444-3009

December 12, 1991

Jack R. Fisher
Thomas, Dean and Hoskins, Inc.
Engineering Consultants
1200 Twenty-Fifth Street South
Great Falls, MT 59405

DEC 16 1991
JRF

Dear Mr. Fisher:

In response to your data request for information on sensitive species in the vicinity of the Plentywood-North highway project; we have checked our databases and currently have no information on sensitive species in that area.

Please remember that the results of a data search by the Montana Natural Heritage Program are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys needed for environmental assessments.

I hope this information is helpful. Let us know if we can be of further assistance.

Sincerely,

Margaret Beer

Margaret Beer
Data Manager



THIS PROJECT
F 34-1(2)
PLENTYWOOD-N

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MONT.

IDE

WILLIAM
MONT.
Williston

GOLDE
Beach

VALLI

Baker

SLO
MONT.
BOWMAN
S.C.

Glasgow
E. 285

Wolf Point
E. 200

Glendive
E. 294

Miles City
E. 271

Forsyth
E. 215

Carlyle

Willard

Winters

Fort Peck

Jordan

Cohagen

Rock Springs

Angela

Vananda

Dighorn

Fort Peck

Jordan

Cohagen

Rock Springs

Angela

Vananda

Dighorn

Fort Peck

Jordan

Cohagen

Rock Springs

Angela

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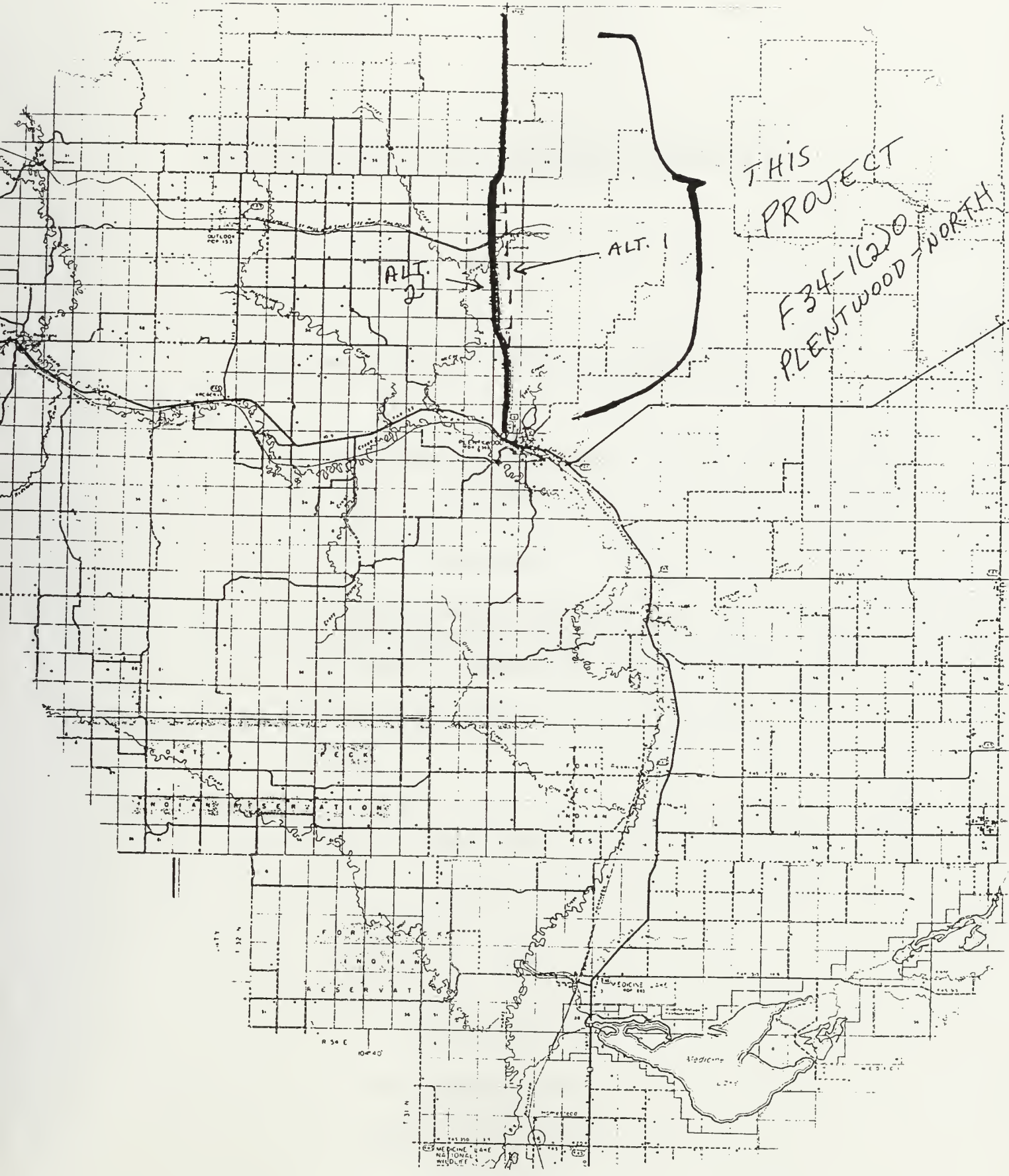
Cohagen

Rock Springs

Angela

Vananda

Dighorn



THIS PROJECT
F34-1(2)
PLENTWOOD-NORTH

ALT. 2

ALT. 1

MEDICINE LAKE NATIONAL WILDLIFE REFUGE

BIOLOGICAL ASSESSMENT

FOR

MONTANA DEPARTMENT OF TRANSPORTATION

PLENTYWOOD - NORTH
F 34-1(2)0

Prepared For

Thomas, Dean, & Hoskins Inc.
1200 Twenty-Fifth Street South
Great Falls, Montana 59405

June 1, 1992

Prepared By

Les R. Reichelt, Biologist
312 Juniper Avenue
Glendive, Montana 59330
406-365-6414

DESCRIPTION OF THE PROJECT

The proposed project is located on Montana Highway 16 in Sheridan County. The project will consist of upgrading the existing roadway and will begin at the intersection with Montana Highway 5 in Plentywood and extend northerly for approximately 15.8 miles to the Canadian border. The new alignment will follow the existing roadway as much as possible. The existing horizontal alignment should be utilized from the beginning of the project for about 3.6 miles north. At this point two alignments are reviewed for about 6.3 miles. At approximately milepost 9.9, the proposed project will return to the existing roadway. From this station, approximately 9.9 miles north of the beginning of the project, the Montana Department of Transportation (MDT) recommends that the new alignment be offset about 50 feet west of the existing roadway. The existing alignment would once again be utilized for the last 0.8 miles of the project. The curves at milepost 12.0 and 14.3 are also scheduled for elimination or modification.

Alternate 1

The proposed alignment would depart from the existing alignment at milepost 3.6 and would be located approximately 1/4 mile east of the current alignment. It would return to the current roadway near milepost 9.9. The reason for studying this alternate is because it would eliminate a number of curves in the existing alignment. This road may become a Highway of National Significance and the MDT believes, as such, the road should meet the highest standards of design.

Alternate 2

The alignment for this alternate would closely follow the current alignment from milepost 3.6 to 9.9. It would depart from the current alignment at milepost 3.6 and would be offset about 50 feet to the west of the current alignment to a point about .2 miles south of Raymond where it would tie in with the current alignment. This shift would reduce the degree of curvature at milepost 6.6 and also minimize impacts to the park located on the east side of the current alignment.

The MDT recommends that the subgrade be constructed to accommodate a future standard 36-foot top width. This project will result in a 28-foot finished top width. The possibility of simply widening and overlaying the first three miles of the project may be investigated. If this is feasible, there would be substantial cost savings compared to full reconstruction.

DESCRIPTION OF THE PROJECT AREA

This proposed project is located in extreme northeast Montana. The area is primarily used for dryland farming with some irrigation. There are a few areas that are used for livestock grazing.

METHODS

This report concerns only those wildlife species that are considered to be threatened or endangered. A letter was written to the United States Fish and Wildlife Service (USFWS) requesting input in regards to what threatened or endangered species may be found in the vicinity of this project. Their response is included in this report. Also, Dennis Flath, a nongame biologist with the Montana Department of Fish, Wildlife, and Parks (MDFWP), was called concerning use of the area by threatened or endangered species. Mr. Flath, is recognized as being one of the state's best authorities on threatened and endangered species. Also, Mike Sullivan, MDFWP biologist stationed in Plentywood and was consulted concerning the presence of any endangered or threatened species in the project area. During the field review for this project, special attention was given to determine if there was any current or previous use of the area by the threatened or endangered species mentioned in the correspondence with the U.S. Fish and Wildlife Service.

For the study of threatened and endangered species it is difficult to determine an exact study area since the size of the study area should vary with the type of activity that is being studied. For migrational purposes a very large study area is in order, however, for nesting activity a much smaller study area would be surveyed. For the purposes of this report, the study area is primarily that area which will directly affected during construction of the project.

FINDINGS

The Federally-listed endangered and threatened species which occur or may occur within the project area are the black-footed ferret (*Mustela nigripes*); bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), piping plover (*Charadrius melodus*), least tern (*Sterna antillarum*), and the whooping crane (*Grus americana*).

Black-footed ferret

The black-footed ferret is one of the rarest of North American mammals. Its range originally extended as far north as Alaska, but the elimination of prairie dogs, its primary food source, has reduced its range considerably. The black-footed ferret prefers living in a prairie dog town surrounded by its favorite source of food. When prairie dogs are scarce, the black-footed ferret will other small rodents (mice, gophers, and ground squirrels) as well as birds, their eggs, and small reptiles.

There are no prairie dog towns found within the project right-of-ways or in the vicinity of the project. It is doubtful that this project will have any effect on the black-footed ferret.

Bald eagle

The bald eagle may occur in the area as spring and/or fall migrants and bald eagles may occur near by as winter residents. Bald eagles are seen most often on sea-coasts or near rivers and lakes. They feed mainly on fish and usually find a tall tree for nesting. Mr. Sullivan stated that the only bald eagles he had observed were passing through the area. During the field review, there were no nest trees found or any evidence of use of the area by bald eagles.

Peregrine falcon

Similar to the bald eagle, the peregrine falcon may occur in the area as spring and/or fall migrants. Peregrines inhabit open country near cliffs. They prey chiefly on birds. There are no cliff habitats located on the project or anywhere near the project. There are no known historic aeries in the vicinity of the project. According to Mr. Flath, in Montana the peregrine falcon would most likely be adversely affected by conducting an activity that would adversely affect the food supply or hunting area of the bird. In the case of the peregrine falcon, this would be wetland type of habitat. Even though this project is going to affect wetlands to some degree, it is probable that there are no peregrine falcons in the area to be affected. Mr. Sullivan was not aware of any peregrine falcon use of the area.

Piping plover

The piping plover is a smallish bird, a little smaller than its more familiar cousin the killdeer (*Charadrius vociferus*). The piping plover prefers to nest on barren flats bordering saline lakes. The one wetland that does contain substantial water was surveyed on May 23, 1992. The entire shoreline was walked with special attention being given to the piping plover. At this time, there were no piping plovers observed. This particular wetland does not appear to be saline in nature. It does not appear that this project will have an adverse affect on the piping plover.

Least tern

The least tern is the smallest of North American terns being only nine inches long with about a twenty inch wingspan. These birds are fairly common on the east and Gulf coasts and less common and declining inland and in the west. They nest on colonies on beaches and sandbars. There were no least terns observed during the field review conducted on May 23, 1992. It is unlikely this project will have any affect on the least tern population.

Whooping crane

This is the tallest North American bird and one of the rarest. This bird breeds in the freshwater marshes of Wood Buffalo National Park in Alberta and also in Grays Lake National Wildlife Refuge in Idaho. When it passes through Montana, it is on its way to its wintering grounds in Aransas National Wildlife Refuge on the Gulf coast of Texas and in refuge areas in New Mexico. It is likely this particular species does pass through this area as it migrates to and from its nesting area in Alberta. The Medicine Lake National Wildlife Refuge is located about twenty miles south of Plentywood. This refuge probably provides a resting stop for migrating whooping cranes. There was no evidence of use of the project area by whooping cranes and it is doubtful construction of this project will have an adverse effect on the whooping crane population.

CONCLUSIONS

Power lines are a potential hazard to any bird but especially to those that are considered perching birds. It appears that during construction of this project the power lines will need to be moved. It is recommended that any power lines that may need to be modified or reconstructed as a result of this project be raptor-proofed following criteria and techniques outlined in the Raptor Research Report No. 4, "Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1981". A copy may be obtained from: Jim Fitzpatrick; Raptor Research Foundation; Carpenter St. Croix Nature Center; 12805 St. Croix Trail; Hastings, Minnesota 55033. Also, the crossing of wetlands with power lines should be avoided whenever possible.

Indirect effects may result from activities associated with highway construction. Those activities include but are not limited to the digging of fill material, the acquisition of gravel from gravel pits, increased noise and dust from construction activities, etc. Since these activities are going to occur but to what extent and in what locations is usually not known at this time, it is difficult to determine what, if any, these activities are going to have on the above mentioned species. It is important that those people involved with the construction of this highway project be aware of what to look for during their construction activities.

The lack of any evidence of regular use of the area by any of the threatened or endangered species reported to use the area, conversations with Mr. Flath, Mr. Sullivan, correspondence with the U.S. Fish and Wildlife Service, the nature of this project would lead to the conclusion that this project will have a minimal direct effect on these species.

DEC 4 1991

TA

Fish and Wildlife Enhancement
301 South Park
P.O. Drawer 10023
Helena, Montana 59626
Federal Building, U.S. Courthouse

December 2, 1991

FWE-61130-Billings
M.17 FHWA (Plentywood-North)

Mr. David S. Johnson, P.E.
Preconstruction Engineer
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

Dear Mr. Johnson:

This responds to your November 27, 1991 letter concerning Montana Department of Highways Project F34-1(2)0 (CN# 1822), Plentywood-North, and requesting identification of the threatened and endangered species that should be considered in connection with this project. Your letter invited other comments we may have.

The Federally-listed endangered and threatened species which occur or may occur within the project area are the black-footed ferret (Mustela nigripes), bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), piping plover (Charadrius melodus), least tern (Sterna antillarum), and the whooping crane (Grus americana). Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the Federal Highway Administration, as the responsible Federal agency, must determine if the proposed actions may affect these endangered species. If you or the Federal Highway Administration determine that any of these species may be affected, it will be necessary to initiate formal consultation with this office. The following information and recommendations may aid you in that determination.

Prairie dog (Cynomys sp.) towns are considered potential habitat for black-footed ferrets. If prairie dog towns are found to occur within the project rights-of-way, surveys for black-footed ferrets may need to be conducted and survey reports submitted to this office for review and concurrence within one year prior to disturbance to the towns. Please contact us for guidelines for conducting ferret surveys if you determine that prairie dog towns or ferrets may be affected by the proposed project.

Both peregrine falcons and bald eagles may occur in the area as spring and/or fall migrants, and bald eagles may occur near by as winter residents. We are not aware of peregrine falcon or bald eagle nest territories in or near the project area. While we do not foresee any substantive issues with the proposed project with regard to the bald eagle and peregrine falcon, any power lines in the vicinity, if not properly constructed, could pose electrocution hazards for these species. To conserve these species and other large raptors protected by Federal law, we urge that any power lines that may need to be modified or reconstructed as a result of the project be raptor-proofed following the criteria and techniques outlined in the Raptor Research Report No. 4, "Suggested Practices for

Raptor Protection on Power Lines - The State of the Art in 1981". A copy may be obtained from:

Jim Fitzpatrick, Treasurer
Raptor Research Foundation
Carpenter St. Croix Nature Center
12805 St. Croix Trail
Hastings, Minnesota 55033.


The June 24, 1991 Preliminary Field Review Report for this project indicates that some wetlands will be impacted. Crossing these wetlands with power lines should be avoided whenever this is at all possible. Where the potential for line strikes by migratory birds appears high, the lines should be rerouted, and if that is not possible, consideration should be given to burying the lines or "marking" any static wires (enlarged lines, marker balls or other means) at the most critical locations.

Also in connection with the wetland impacts, we assume a wetland inventory and impact assessment has or will be completed in accordance with the 1989, "Interagency Memorandum of Understanding: Management and Mitigation of Highway Construction Impacts to Wetlands in the State of Montana". We urge completion of any needed wetland mitigation in full accordance with that Memorandum of Understanding. We also note, in connection with potential wetland encroachments, that the project is in a part of the state where a number of piping plovers are known to nest on barren flats bordering saline lakes in the general area. From the limited information available, it appears the wetlands to be impacted by the project lack shorelines with such characteristics. However, if such barren shoreline areas occur, the possible impacts on nesting plovers needs to be addressed.

We lack the necessary information in this office to determine whether or not the proposed project would cross lands owned or managed by the Service. In this regard, we note that if such lands are involved it would be necessary to obtain a right-of-way from this agency. The appropriate local contact, in such an event, is Medicine Lake National Wildlife Refuge, HC51, Box 2, Medicine Lake, MT 59247.

We appreciate your efforts to consider and conserve fish and wildlife resources, including threatened and endangered species. If you have questions regarding this letter, please contact Mr. Gary Wood of our Billings Suboffice (406) 657-6750.

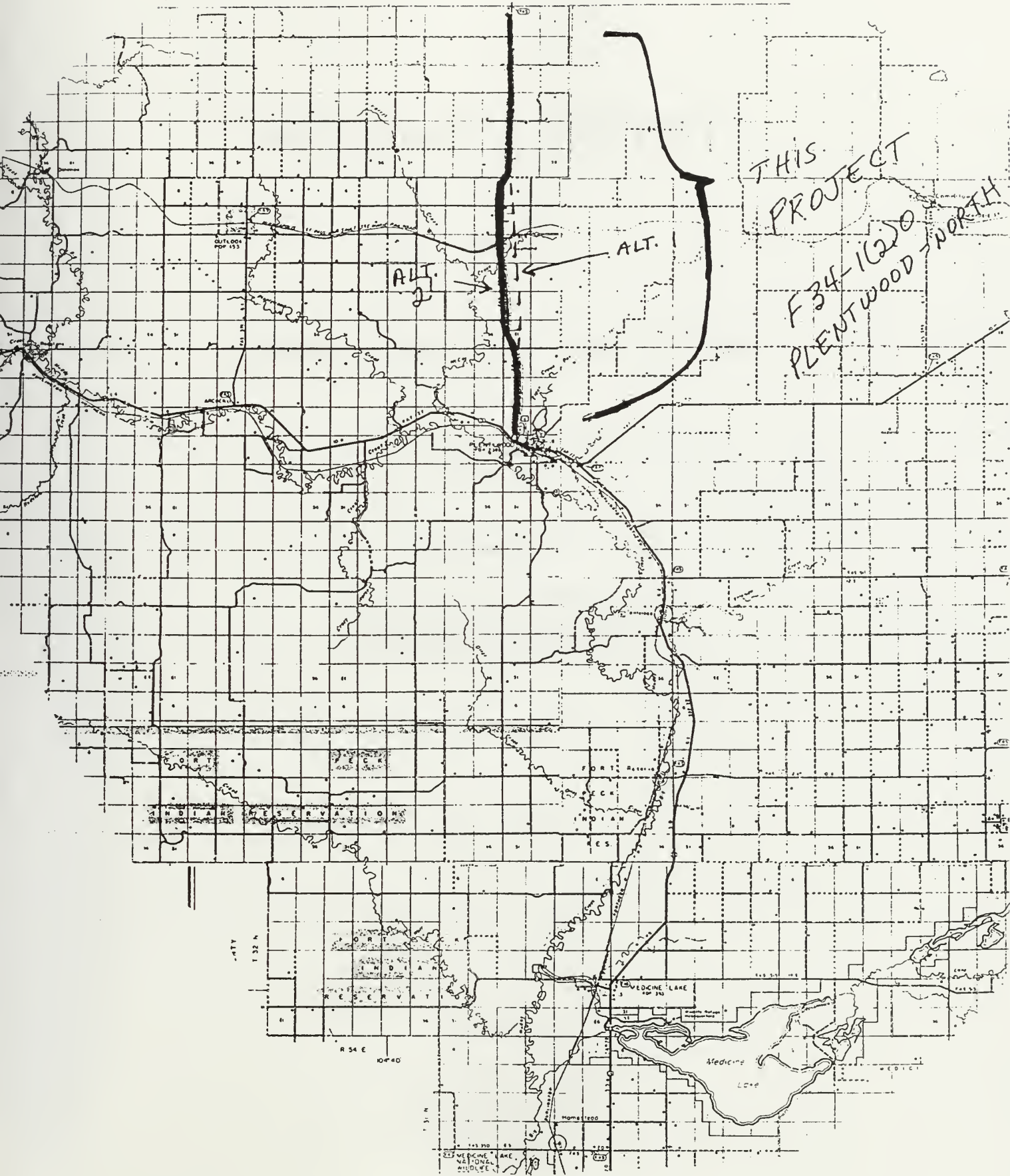
Sincerely,


Dale Harms
State Supervisor
FOR Montana State Office

JGW/jf

cc: Edrie Vinson, Montana Department of Highways (Helena, MT)
Jack Fisher, P.E., Thomas, Dean & Hoskins Inc. (Great Falls, MT)
Manager, Medicine Lake NWR
Suboffice Coordinator, USFWS, Fish & Wildlife Enhancement (Billings, MT)

"Take Pride in America"



THIS PROJECT
F34-1(2)0
PLENTWOOD NORTH

ALT. 2

ALT. 1

FORT SNELLING
INDIAN
RESERVATION

MEDICINE LAKE

Medicine
Lake

HOME STEAD
MEDICINE LAKE
NATIONAL
MONUMENT

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BIOLOGICAL REPORT

FOR

MONTANA DEPARTMENT OF TRANSPORTATION

PLENTYWOOD - NORTH
F 34-1(2)0

Prepared For

Thomas, Dean, & Hoskins Inc.
1200 Twenty-Fifth Street South
Great Falls, Montana 59405

June 1, 1992

Prepared By

Les R. Reichelt, Biologist
312 Juniper Avenue
Glendive, Montana 59330
406-365-6414

DESCRIPTION OF THE PROJECT

The proposed project is located on Montana Highway 16 in Sheridan County. The project will consist of upgrading the existing roadway and will begin at the intersection with Montana Highway 5 in Plentywood and extend northerly for approximately 15.8 miles to the Canadian border. The new alignment will follow the existing roadway as much as possible. The existing horizontal alignment should be utilized from the beginning of the project for about 3.6 miles north. At this point two alignments are reviewed for about 6.3 miles. At approximately milepost 9.9, the proposed project will return to the existing roadway. From this station, approximately 9.9 miles north of the beginning of the project, the Montana Department of Transportation (MDT) recommends that the new alignment be offset about 50 feet west of the existing roadway. The existing alignment would once again be utilized for the last 0.8 miles of the project. The curves at milepost 12.0 and 14.3 are also scheduled for elimination or modification.

Alternate 1

The proposed alignment would depart from the existing alignment at milepost 3.6 and would be located approximately 1/4 mile east of the current alignment. It would return to the current roadway near milepost 9.9. The reason for studying this alternate is because it would eliminate a number of curves in the existing alignment. This road may become a Highway of National Significance and the MDT believes, as such, the road should meet the highest standards of design.

Alternate 2

The alignment for this alternate would closely follow the current alignment from milepost 3.6 to 9.9. It would depart from the current alignment at milepost 3.6 and would be offset about 50 feet to the west of the current alignment to a point about .2 miles south of Raymond where it would tie in with the current alignment. This shift would reduce the degree of curvature at milepost 6.6 and also minimize impacts to the park located on the east side of the current alignment.

The MDT recommends that the subgrade be constructed to accommodate a future standard 36-foot top width. This project will result in a 28-foot finished top width. The possibility of simply widening and overlaying the first three miles of the project may be investigated. If this is feasible, there would be substantial cost savings compared to full reconstruction.

Soon after leaving Plentywood, the highway passes through areas of cultivated grain. This will be the predominant land use for the rest of the project area. There are occasional areas of pasture that will be used for livestock grazing.

This photograph illustrates the type of terrain through which this project passes.



Figure 2 - North view near milepost 1

This photograph displays a typical coulee through which the highway project occasionally crosses. At this point in the project, near milepost 3.8, the new alignment will be crossing the area in the background.



Figure 3 - West view near milepost 3.8

DESCRIPTION OF THE PROJECT AREA

This proposed project is located in extreme northeast Montana. The area is primarily used for dryland farming with some irrigation. There are a few areas that are used for livestock grazing.

This first photograph was taken near Plentywood at the south end of the project. At this location, the area is primarily residential with the golf club located along the east side of the highway.



Figure 1 - North view near milepost 0.4

This photograph was taken near milepost 6.5, west of the highway just below Raymond Reservoir. The new highway alignment, if alternate two is chosen, will pass somewhere between the highway and the farm buildings that can be seen along the left edge of the picture.



Figure 4 - West view near milepost 6.5

The next two photographs were taken along the corridor that alternate one will follow. The terrain is similar to that found along alternate two. This photograph shows the cultivated fields that are found along most of this route.



Figure 5 - North view along alternate 1

This photograph was also taken along the alternate 1 route. This illustrates the coulee habitat that will be affected if this alternate is chosen.



Figure 6 - North view along alternate 1

The last two photographs were taken near the north end of the project. This photograph was taken near milepost 12.5 and is looking towards the south. The cultivated fields are once again evident.



Figure 7 - South view near milepost 12.5

This photograph was taken near milepost 14.7 and shows a small hill that will be the site of the new alignment. As can be seen, the current alignment goes around the base of the hill. The new alignment will remove this curve.



Figure 8 - South view near milepost 14.7

WILDLIFE

Mark Sullivan, wildlife biologist for the Montana Department of Fish, Wildlife, and Parks, stationed in Plentywood, was contacted concerning the wildlife species that would be found in the project area. Mule deer (*Odocoileus hemionus*) are only rarely seen in the area but white-tailed deer (*O. virginianus*) are much more common. Pronghorn antelope (*Antilocapra americana*) may also pass through the area but again only rarely. The deer use the coulee bottoms for resting and shelter and the grasslands and cultivated fields for feeding.

Along with these big game animals there may also be found a number of smaller mammals that are often found in most areas of Montana. These would include but not be limited to cotton-tailed rabbit (*Sylvilagus* spp.), mice (*Peromyscus* spp.), voles (*Microtus* spp.), shrews (*Sorex* spp.), and ground squirrels (*Spermophilus* spp.) Some of these will use the project area for daily activities, however, it is likely these species will move to adjacent suitable habitat when construction begins.

Along with the mammals that were mentioned above, there are a number of bird species that may be found in the area. Ring-necked pheasants (*Phasianus colchicus*) were not observed but are present, as are Hungarian partridge (*Perdix*), and sharp-tailed grouse (*Pediacetes phasianellus*). Only the Hungarian partridge were observed during a field

review but Mr. Sullivan stated the other species were present and use the area in their daily activities. Numerous song birds, shore birds, and raptors can also be found frequenting the project area.

FISHERIES

The only fisheries that is in the vicinity of this project is Raymond Reservoir. The fish species found in the lake are Northern pike () and yellow perch ().The following photograph shows the lower end of the reservoir near milepost 6.7. The present highway alignment appears to form a portion of the dam that is creating Raymond Reservoir. The new alignment, if alternate two is chosen, does not appear to adversely affect the reservoir since the new alignment will be further to the west than the current alignment. The old roadway may have to be left in place since it does appear to be functioning to some degree as a dam. Alternate one would completely miss the reservoir but may affect the water draining into the reservoir. Precautions should be made during construction of alternate one to minimize any adverse affect to the reservoir.



Figure 9 - North view of Raymond Reservoir

RESULTS

There are three general habitat types present along this project. The upland grasslands(pasture), cultivated fields, and coulee bottoms. The most predominant type is cultivated fields. The amount of each habitat type found along each of the alternates is listed below. These numbers are only estimates and are indicators of relative abundance of each habitat type.

HABITAT	ALTERNATE 1	ALTERNATE 2
Cultivated	22.76*	22.38
Pasture	6.25	6.4
Coulee	.45	.5

*these numbers indicate miles of habitat adjacent to the roadway(both sides of the highway are included)

The effect this project on wildlife should be minimal. There are no areas of critical habitat being removed from the area. If alternate one is chosen, there will be more habitat destruction than if alternate two is followed. There will be some fences removed and replaced as a part of the new construction; however, they will be replaced according to Montana Department of Transportation standards and should not present any added impacts to the wildlife. Improved highway design sometimes leads to faster road speeds by travelers. These faster speeds usually mean more collisions with wiidlife. Hopefully, some of these impacts will be negated by the improved sight distance that will come with the new designs.

The fisheries that exist in Raymond Reservoir should not be impacted by this project. However, precautions should be taken during construction to insure there will be little, if any, disturbance to this valuable resource.

Montana Department
of
Fish, Wildlife & Parks



Rural Route 1 4210
Glasgow, MT 59230
December 20, 1991

JAC

DEC 2 1991

Thomas, Dean & Haskins, Inc.
Engineering Consultants
1200 25th Street South
Great Falls, MT 59605

Jeff Stuebel, Municipal
JRF

RE: PLENTYWOOD-NORTH F34-1(2)0 CN# 1822

Job No. _____

Dear Sirs:

We have reviewed the plans for Plentywood-North and have the following comments:

Fisheries; Raymond Dam near MP7 has a popular fishery with Northern pike/yellow perch in the reservoir. Neither alternative 1 or 2 appear to affect the reservoir, however alternative 1 with a wider right of way may affect the current access to the reservoir. At present, there are three access points to the reservoir which would be nice to maintain.

No other fisheries impacts appear on this proposed project.

Wildlife habitat; There appears to be three wetland areas that may be affected. A 4-acre wetland at MP12 alternate 1; A 3-4 acre wetland near MP 14 alternate 1; A smaller wetland area near MP7 alternate 2. These wetlands provide pair and brood habitat for waterfowl and whitetail deer use the marsh vegetation (cattails and bullrushes) for hiding and thermal cover.

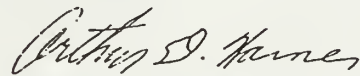
Previous alteration of the first wetland has already destroyed some wildlife habitat. A dike has been constructed across the wetland in an attempt to put some of the wetland area into crop production.

Both of the other sites are intermittent creeks and their adjacent flood plains. These areas provide habitat for waterfowl, deer and upland game birds.

Since mitigation for wetland losses is necessary, the following suggestions should be considered when constructing a new wetland:

- 1) The majority of the wetland should have a maximum water depth of 6 feet or less. Depths of 2-3 feet are ideal for the growth of marsh vegetation. "Dugout" type wetlands should be strictly avoided.
- 2) The shoreline should be long and irregular and there should be a very gentle gradient extending into the water. Steep banks should be avoided.
- 3) The wetland should be located next to suitable nesting cover and away from cropland.
- 4) The wetland should be located within 1 mile to other wetlands.

Sincerely,



Arthur D. Warner
Regional Supervisor

ADW/je

cc: Al Wipperman
Harold Wentland



THIS PROJECT
F 34-1(2)
PLENTYWOOD-N

SASK.
MONT.

IDE

W. LLIAM

Williston

Fairview

Alexand

Crane

Sidney

Glendive

Wibaux

Wibaux

GOLDE

VALLE

Saint Phillip

Cartlyle

Willard

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THIS PROJECT
F34-1(2)0
PLENTWOOD NORTH

ALT. 2

ALT. 1

MEDICINE LAKE

Medicine
Lake

MEDICINE LAKE
NATIONAL
WILDLIFE

